

FIG. 1A

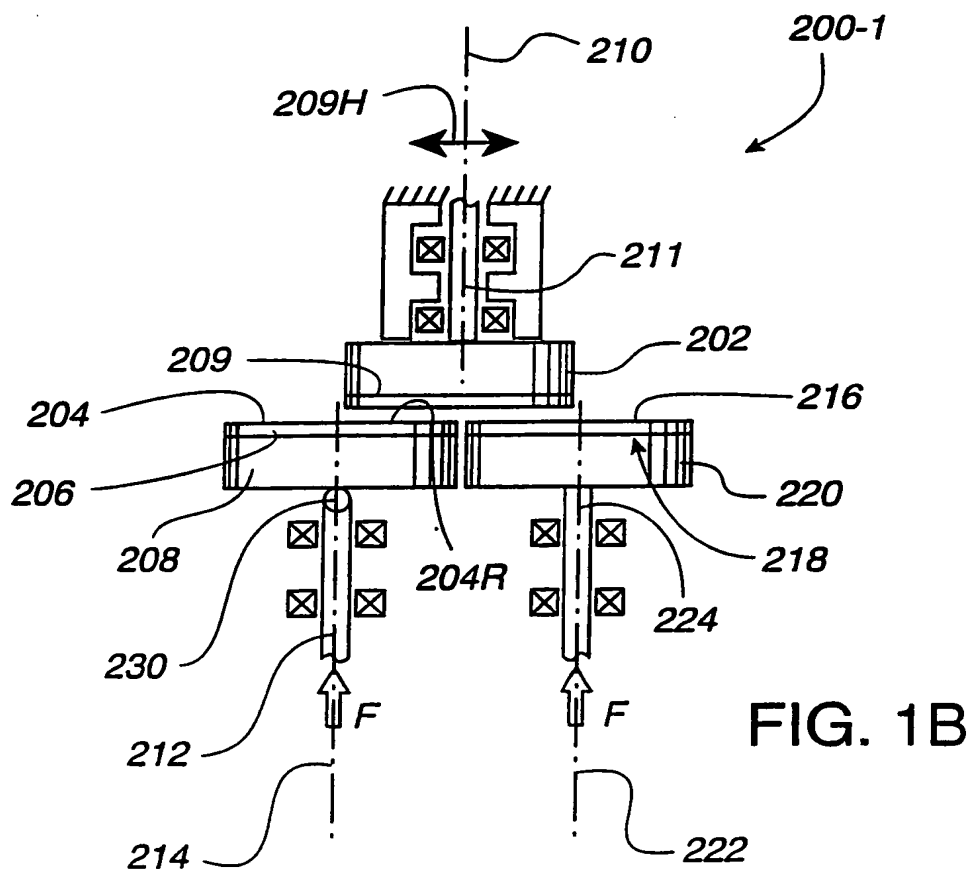


FIG. 1B

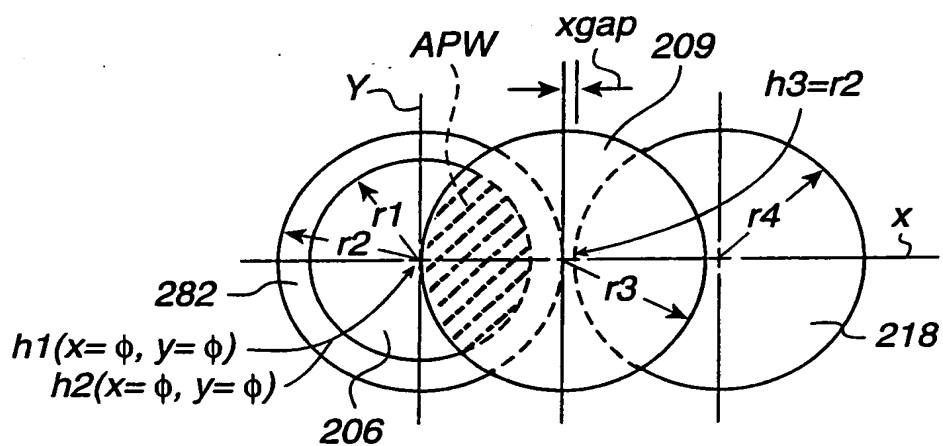


FIG. 1C-1

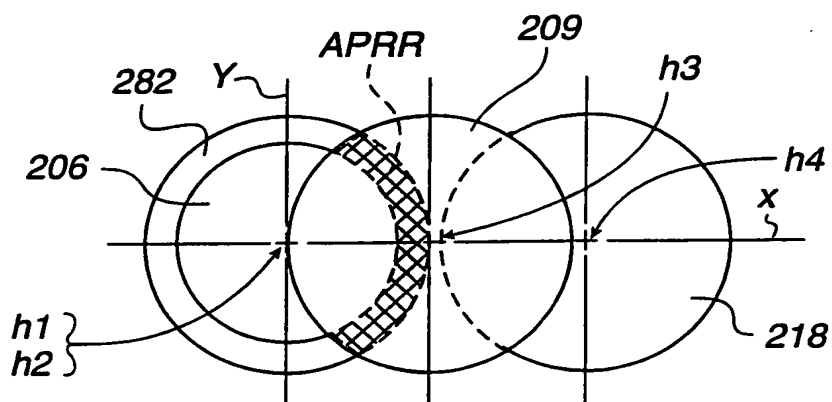


FIG. 1C-2

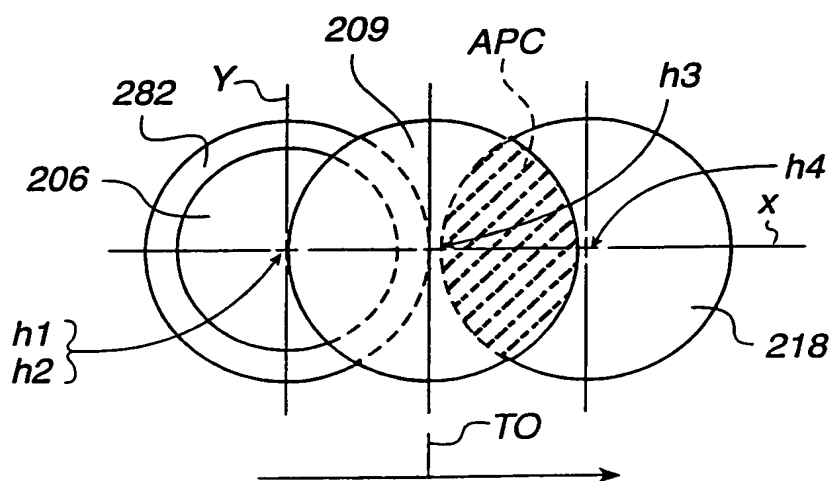


FIG. 1C-3

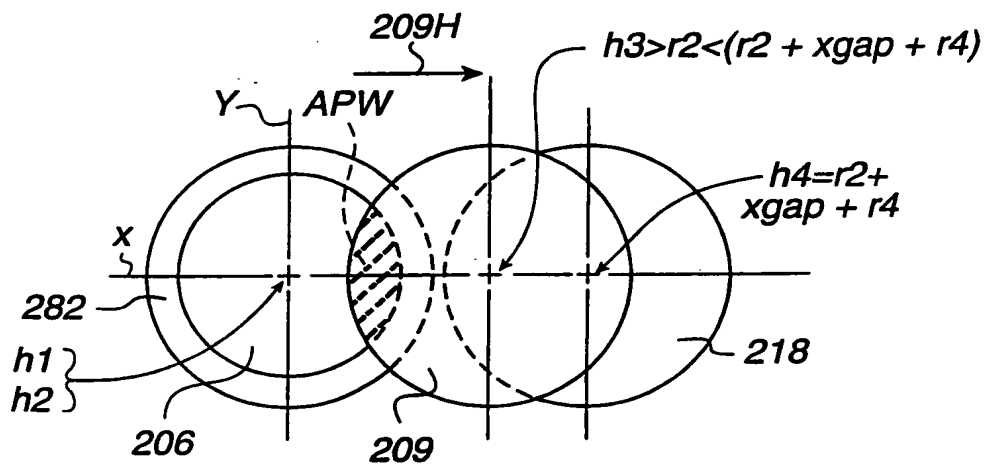


FIG. 1D-1

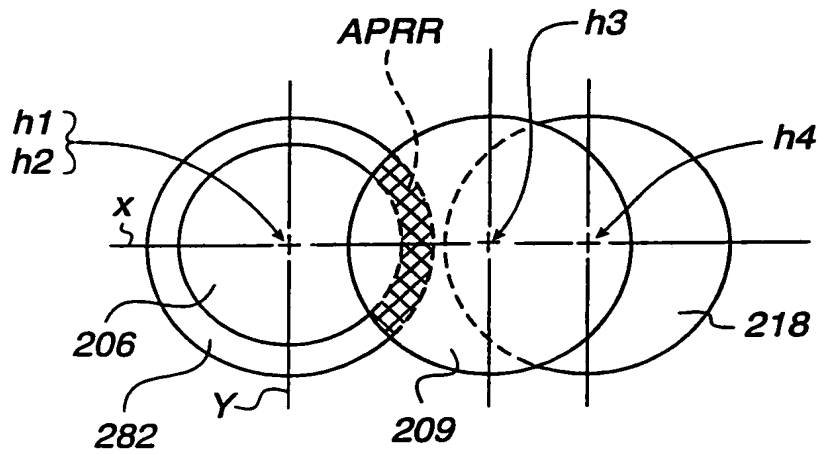


FIG. 1D-2

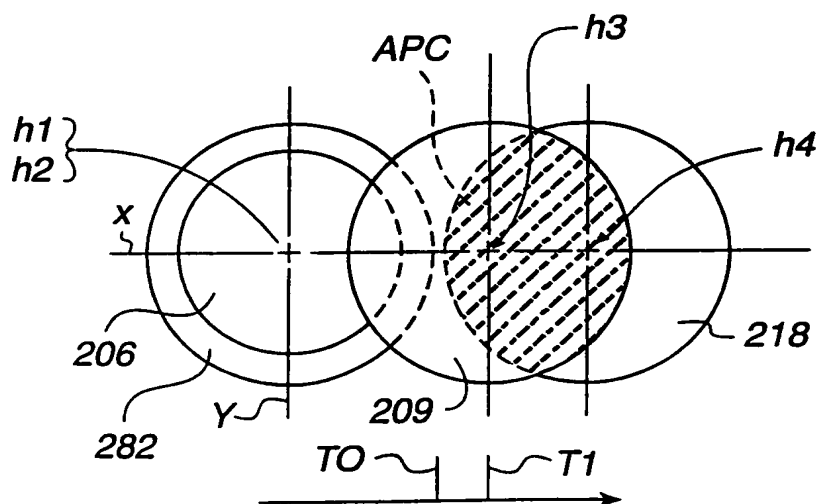


FIG. 1D-3

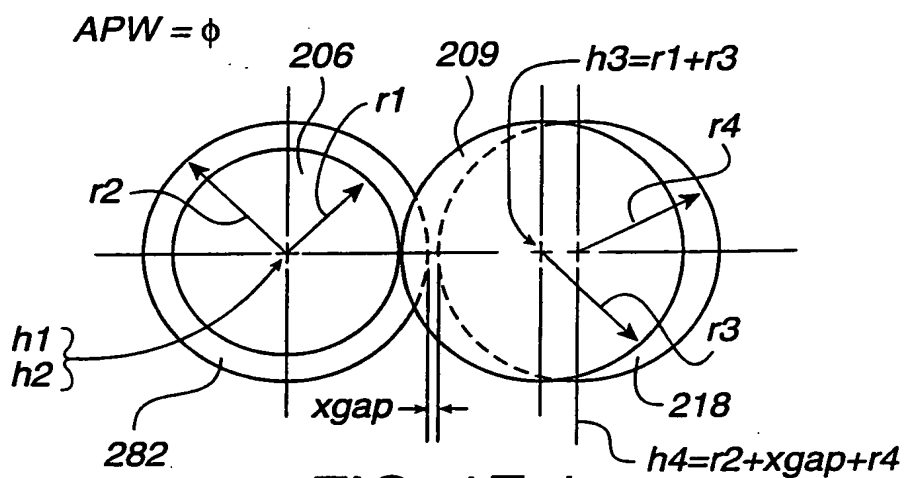


FIG. 1E-1

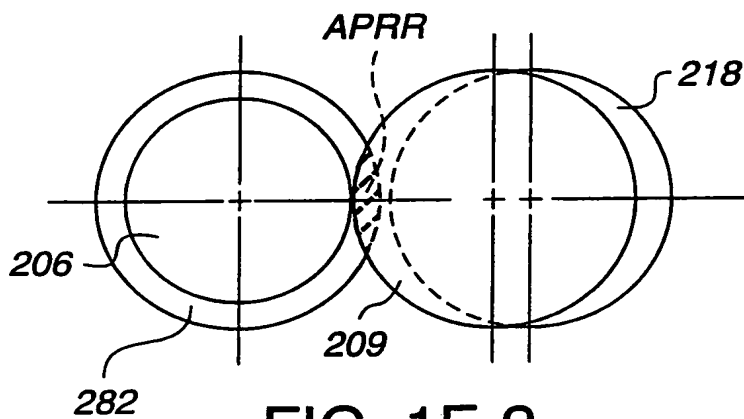


FIG. 1E-2

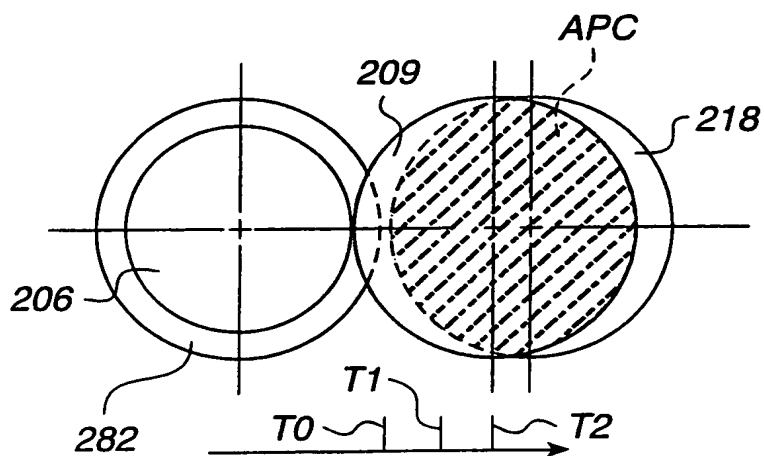


FIG. 1E-3

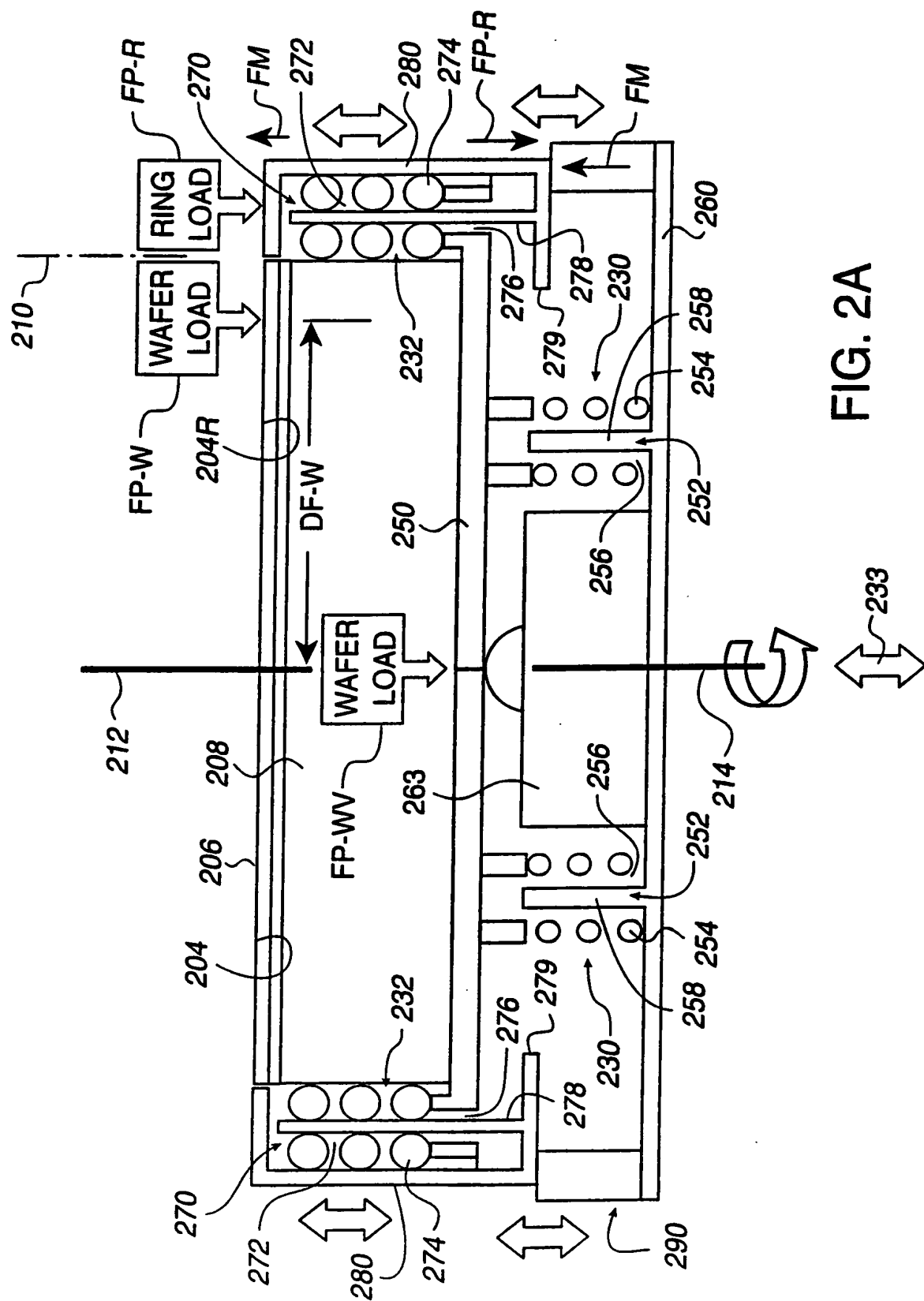


FIG. 2A

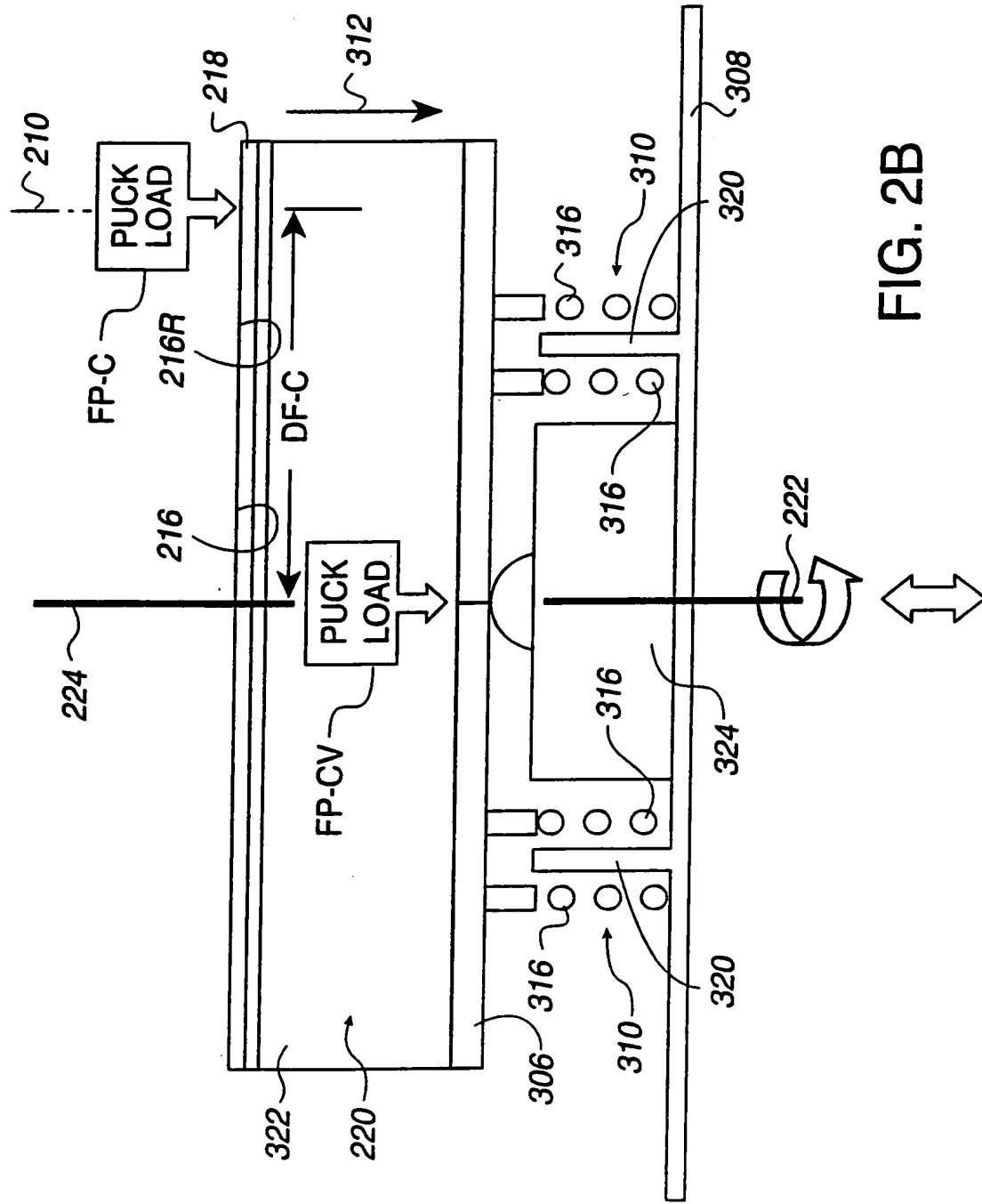


FIG. 2B

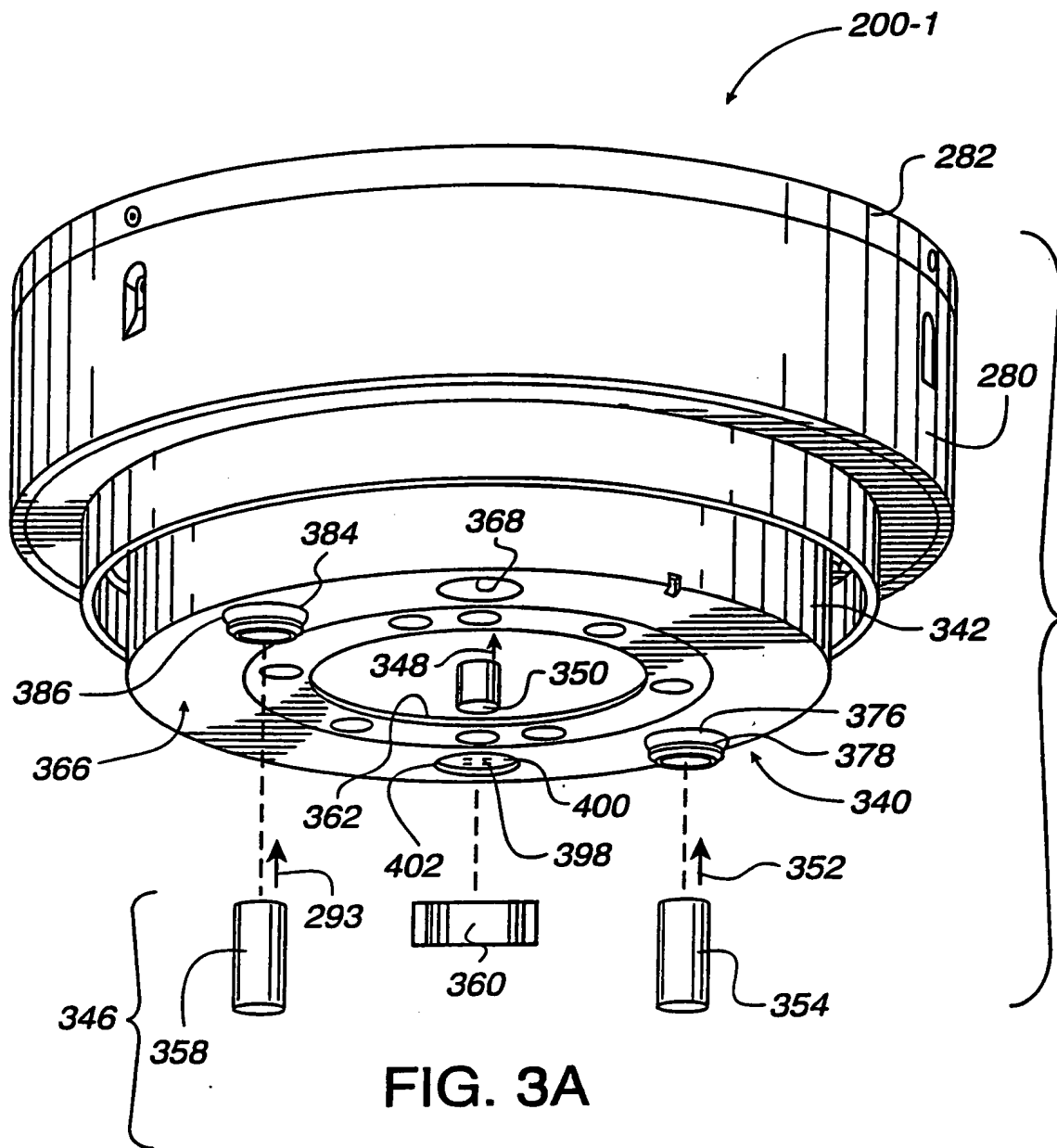


FIG. 3A

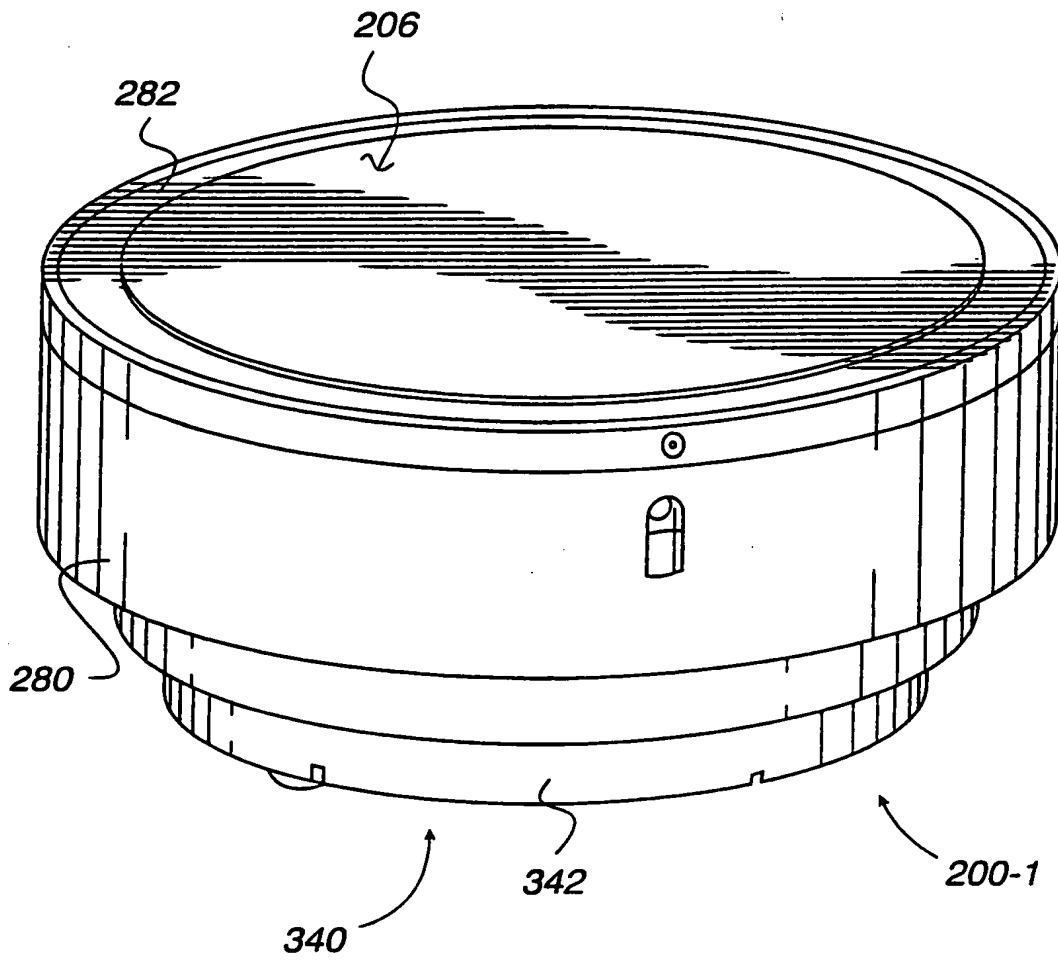


FIG. 3B

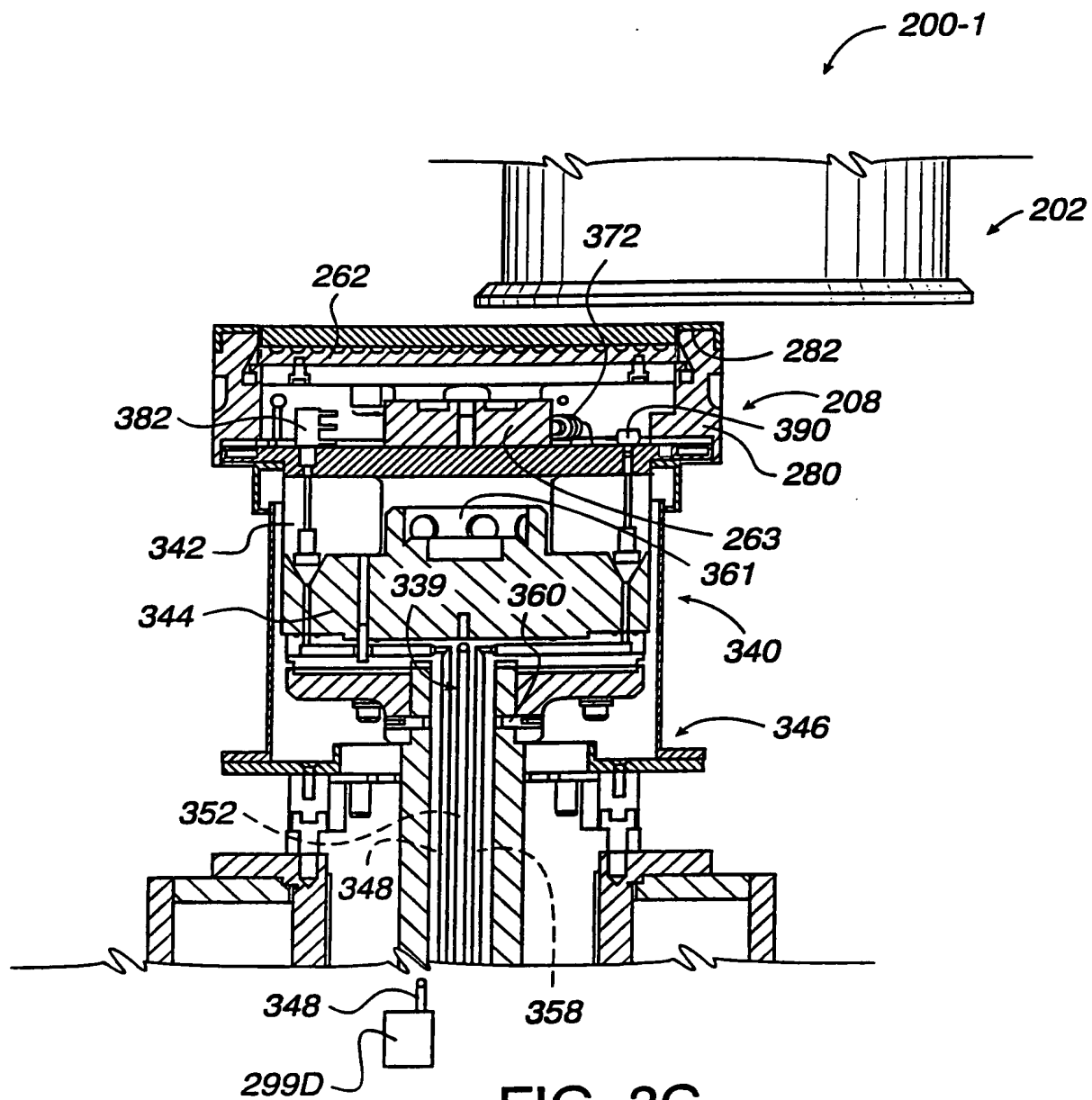


FIG. 3C

FIG. 4A

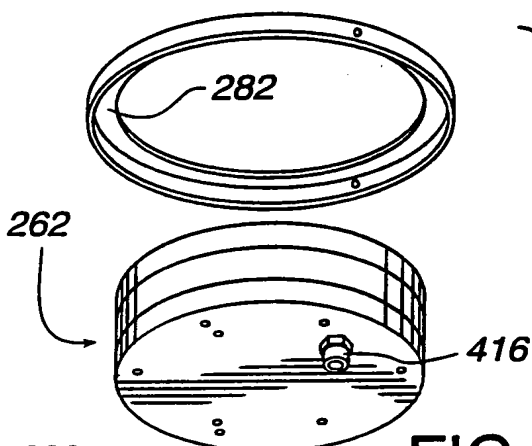
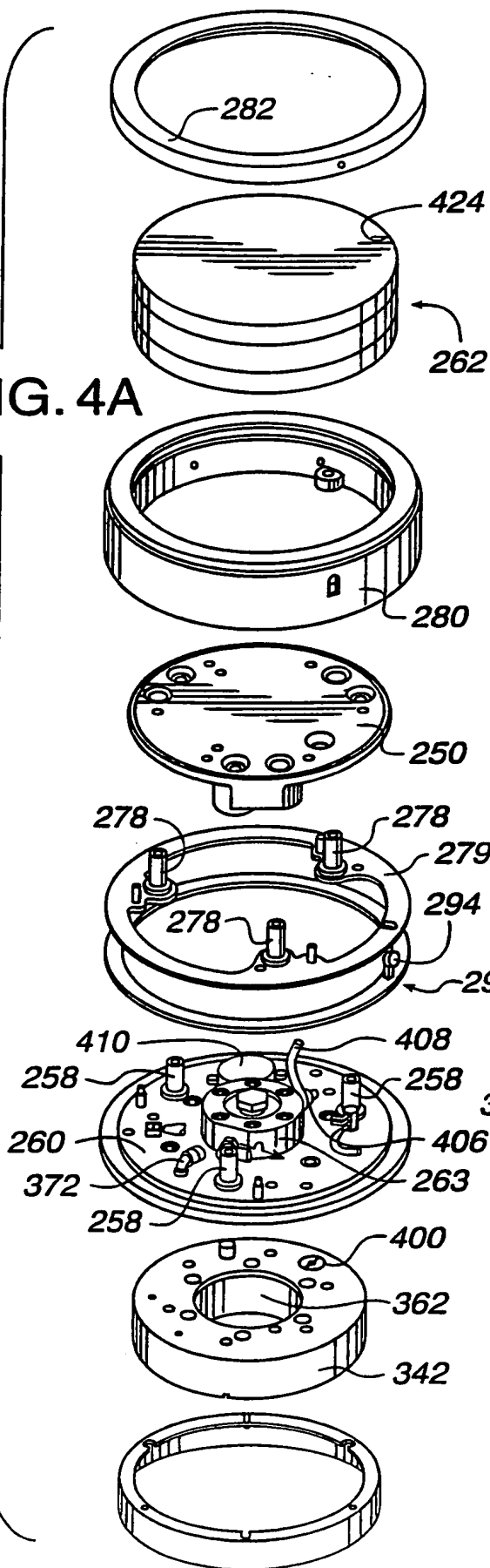
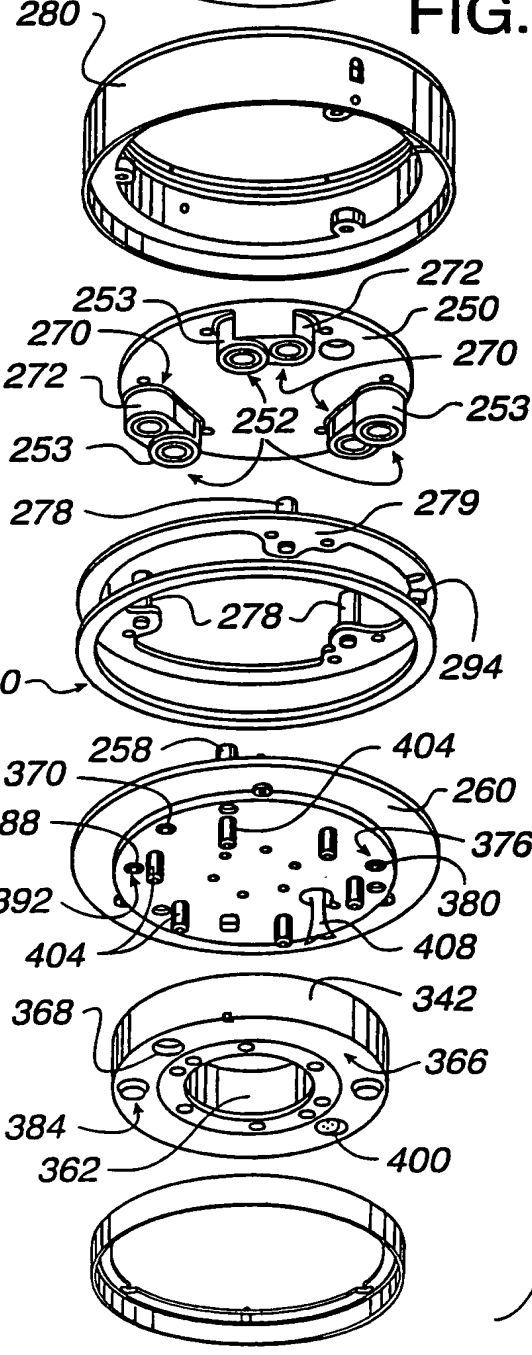


FIG. 4B



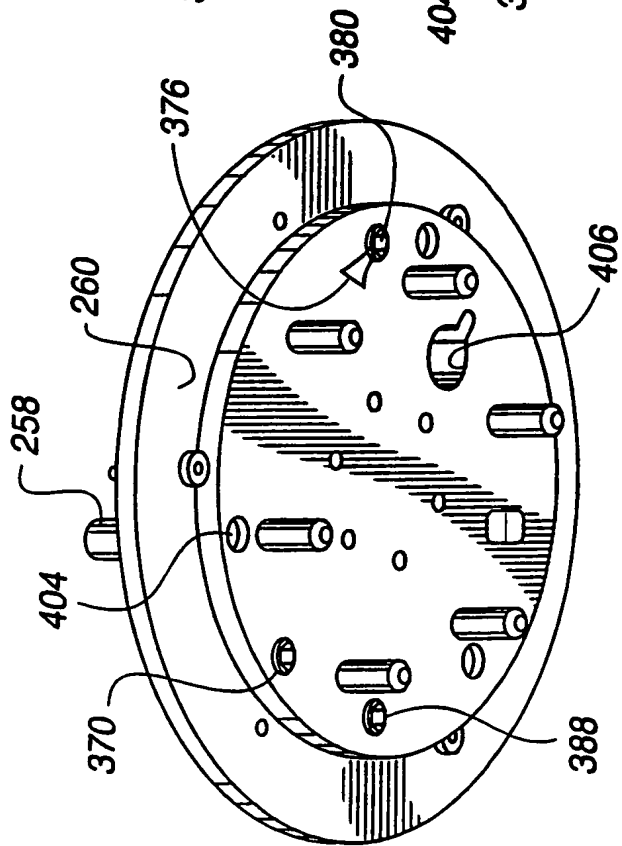


FIG. 5A-1

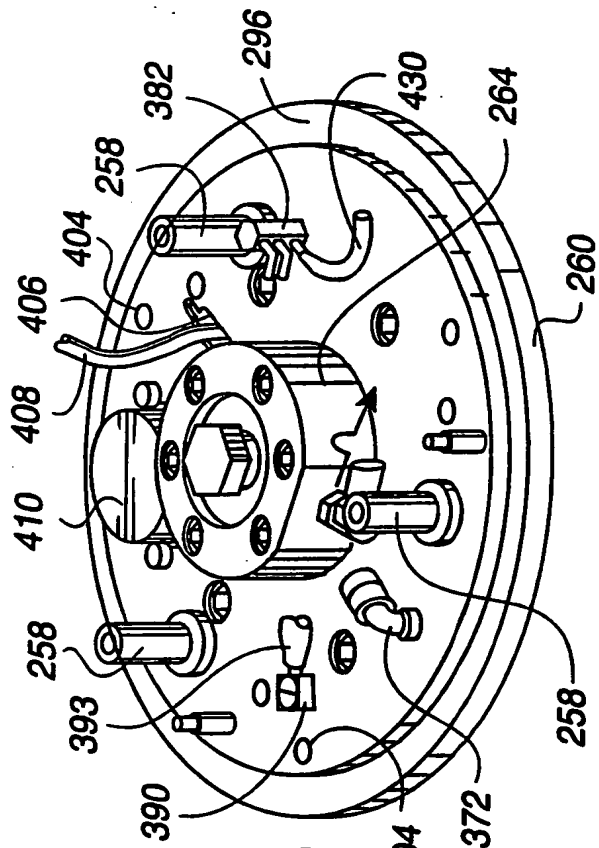


FIG. 5B-1

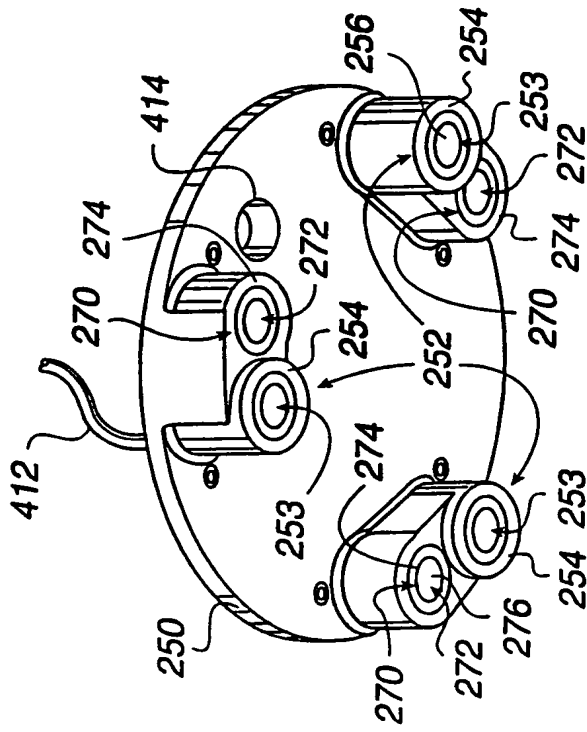


FIG. 5A-2

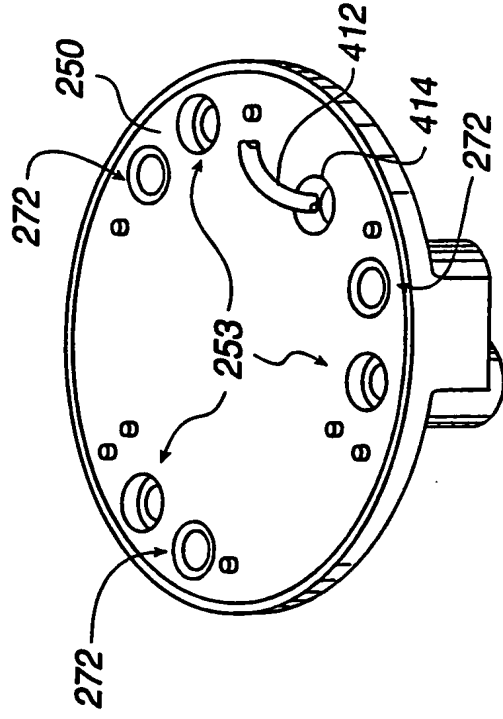


FIG. 5B-2

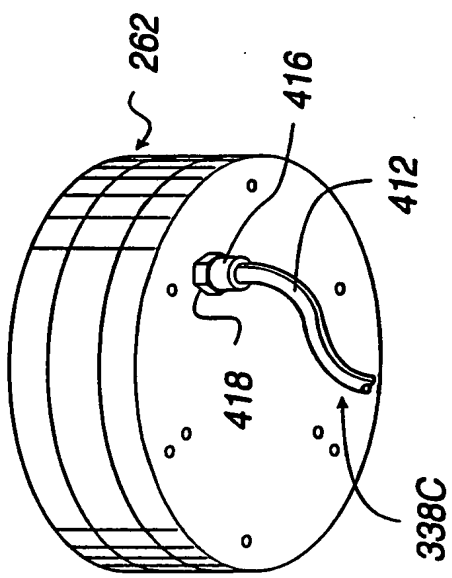


FIG. 5A-3

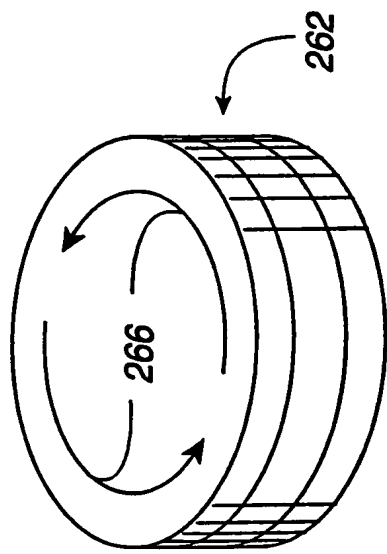


FIG. 5B-3

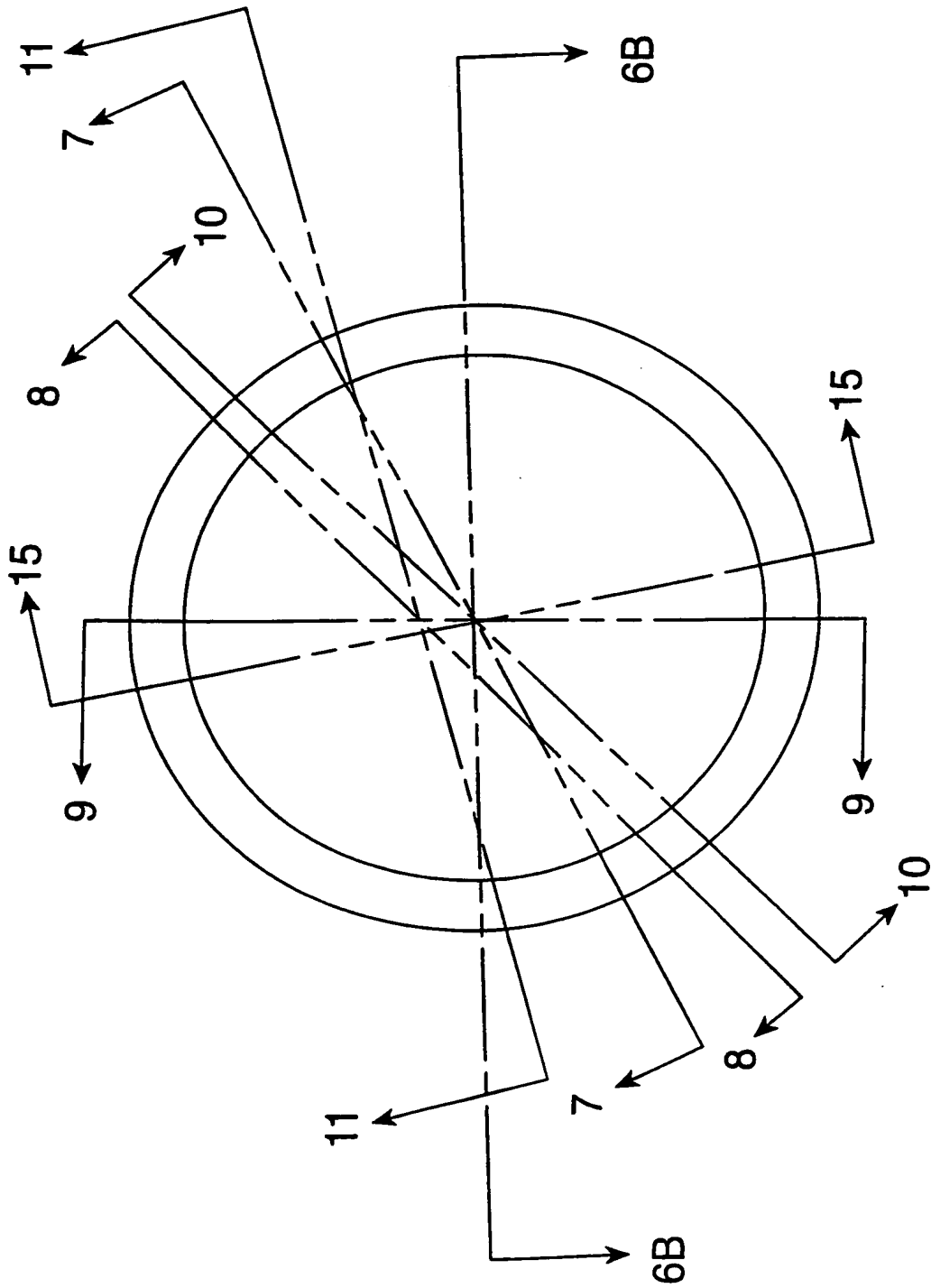


FIG. 6A

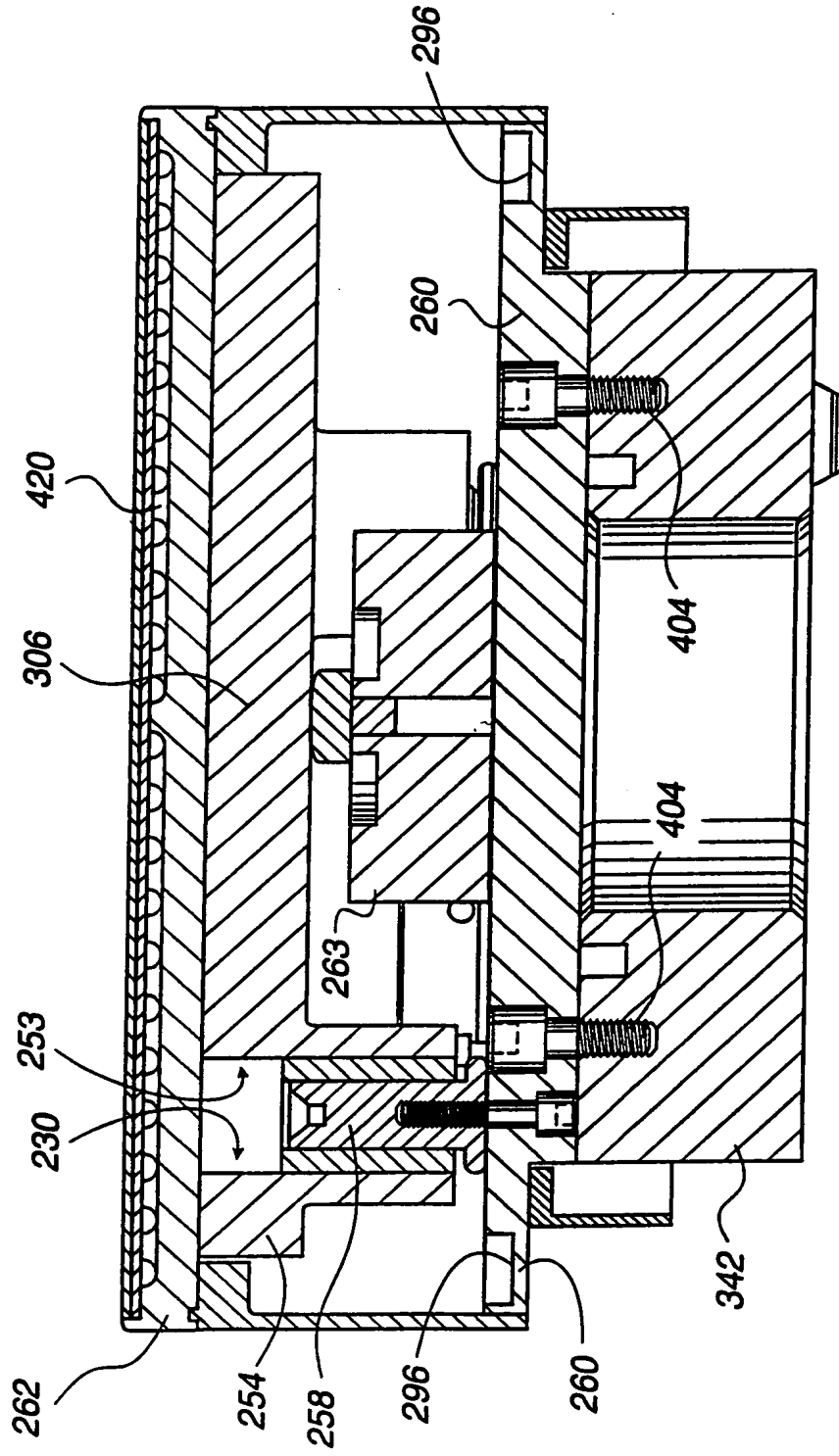


FIG. 6B

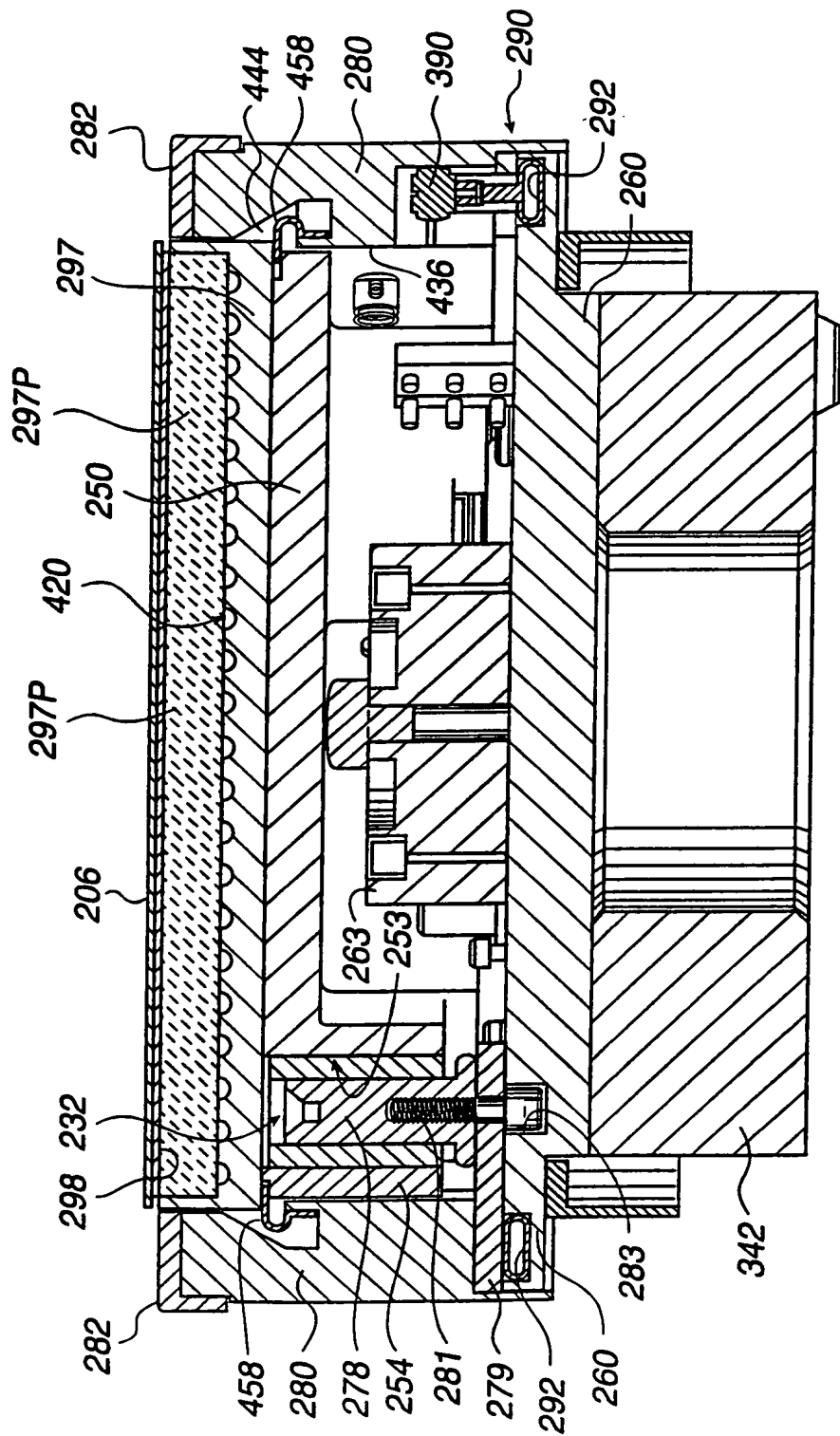


FIG. 7

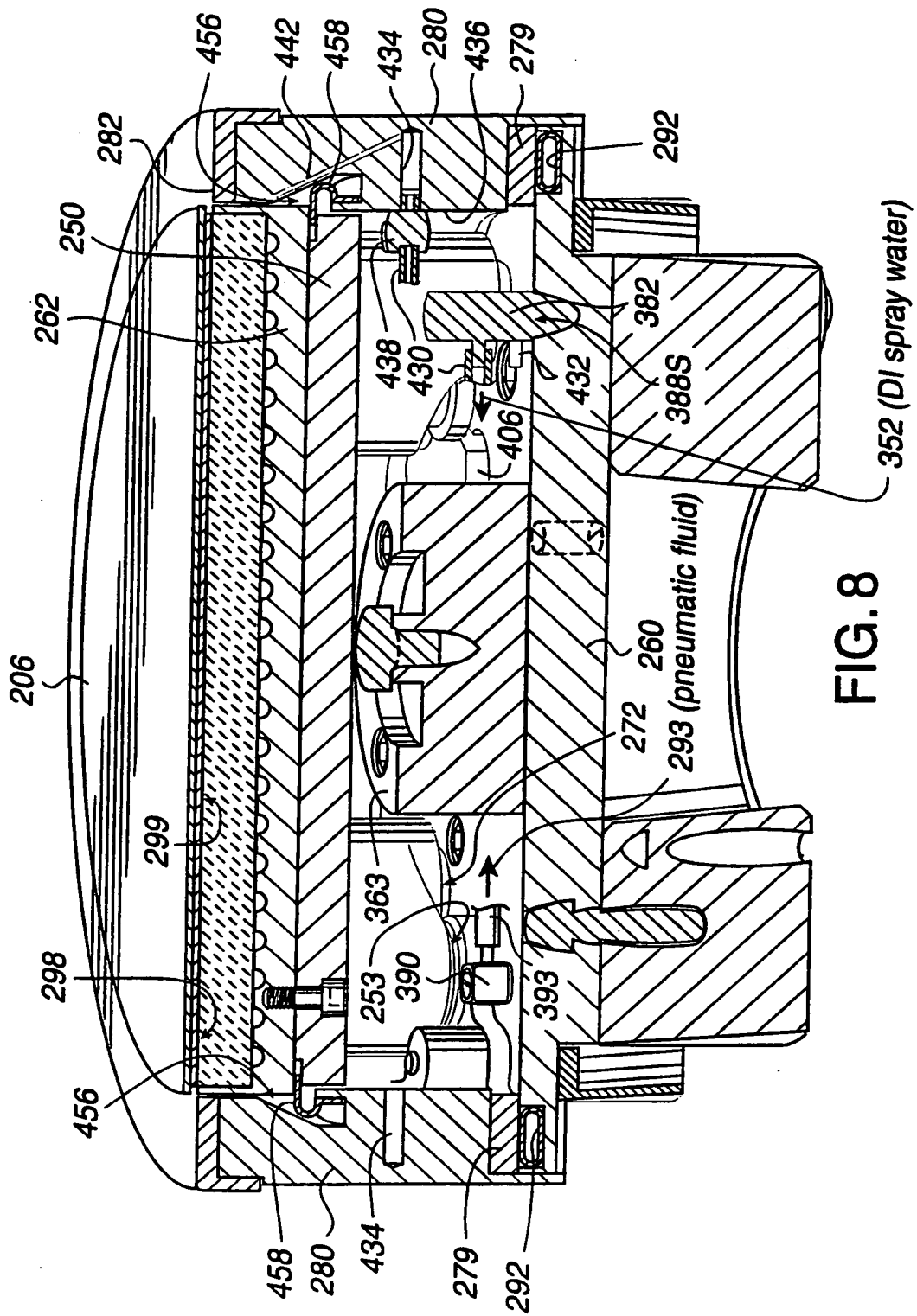


Fig. 8

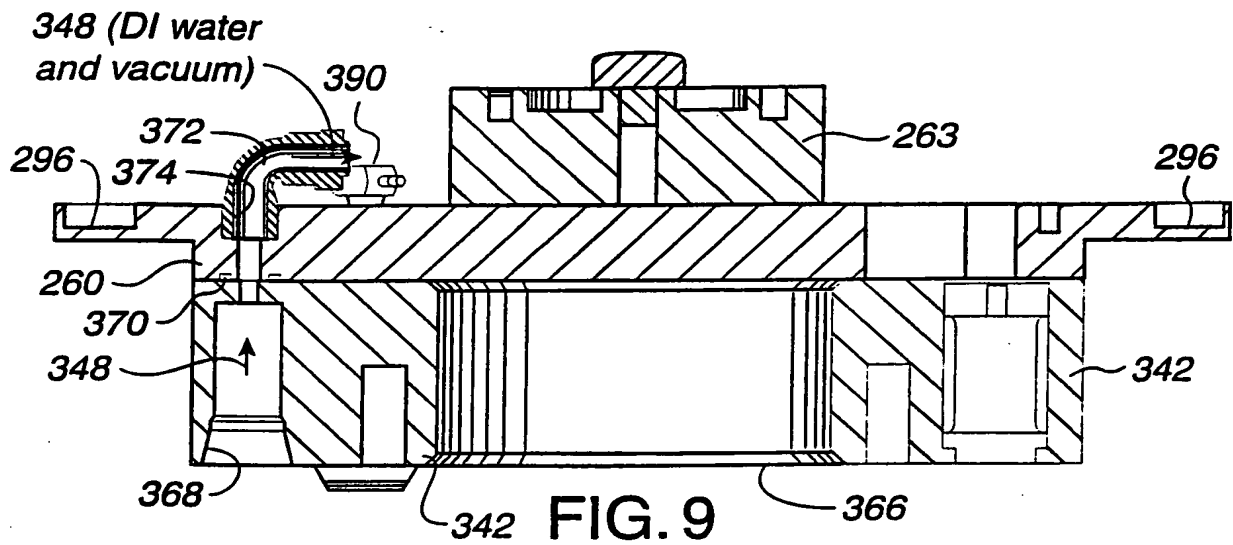


FIG. 9

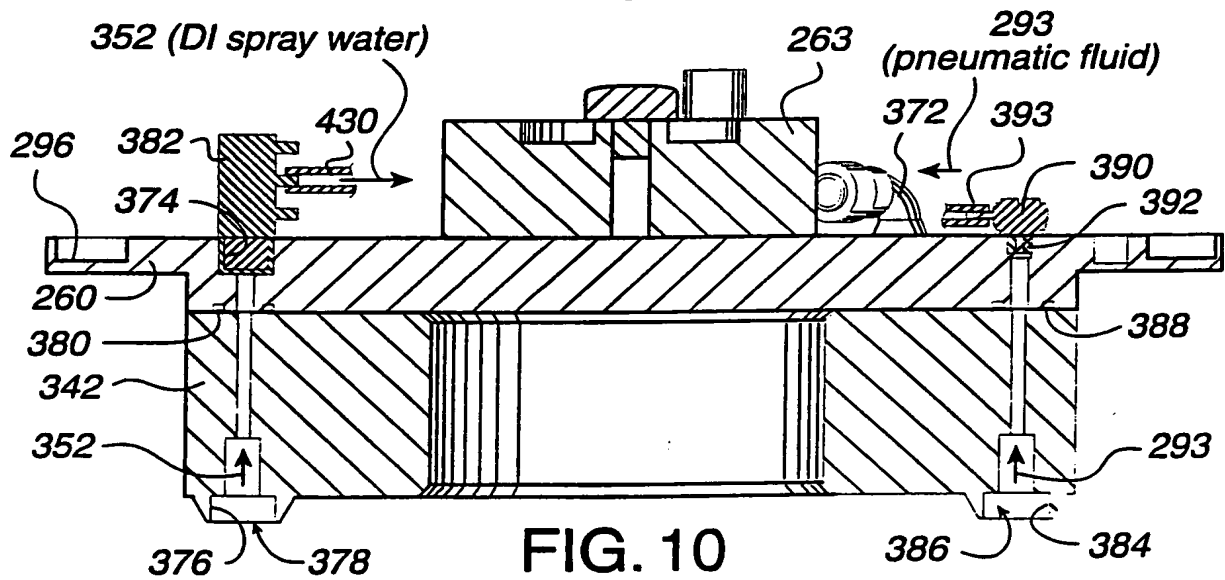


FIG. 10

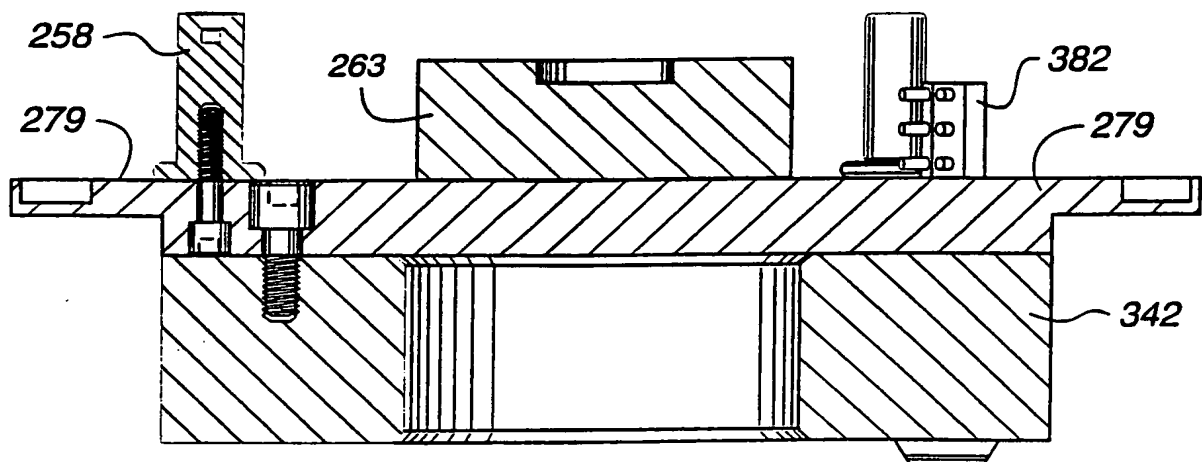


FIG. 11

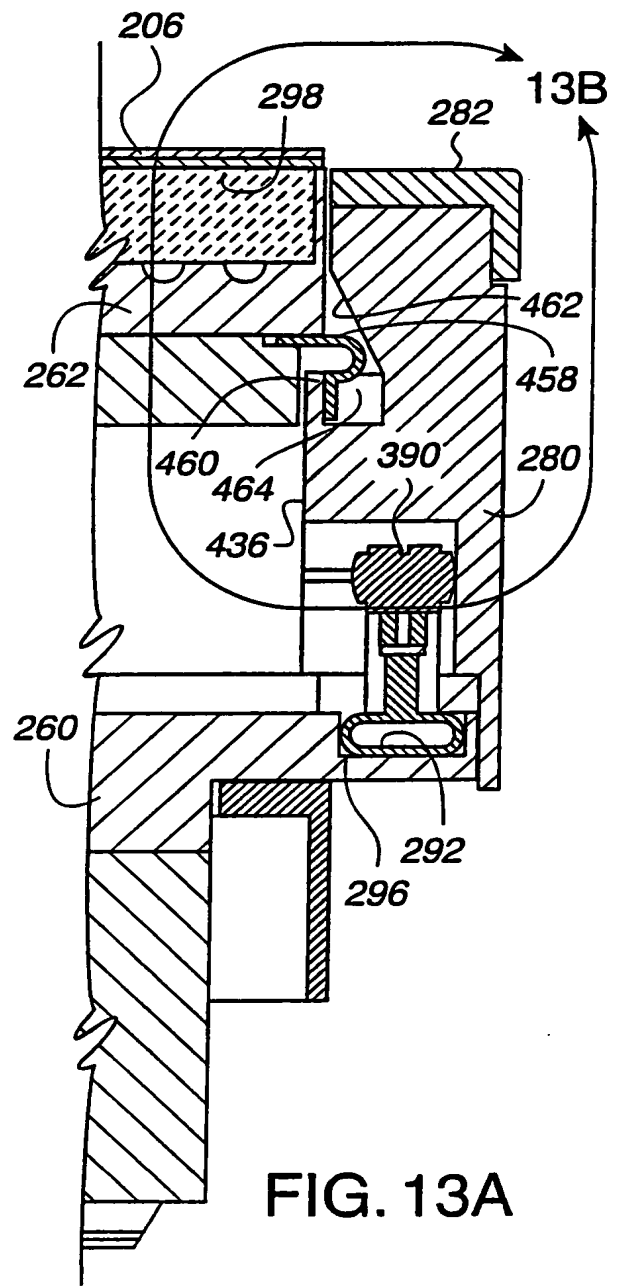
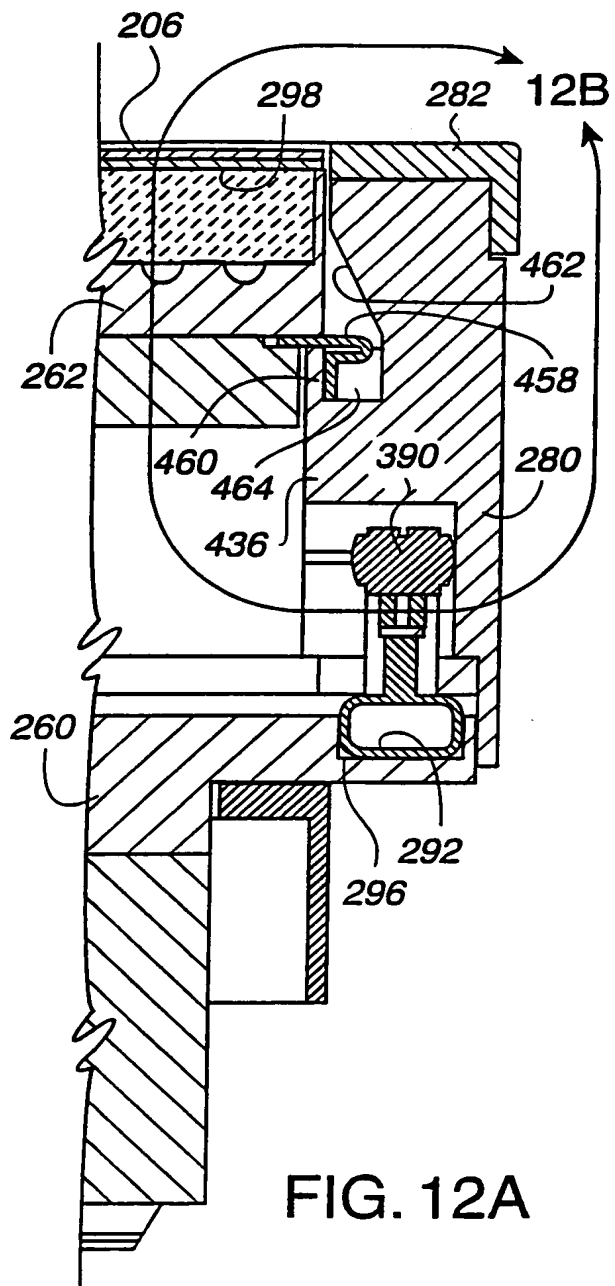


FIG. 12B

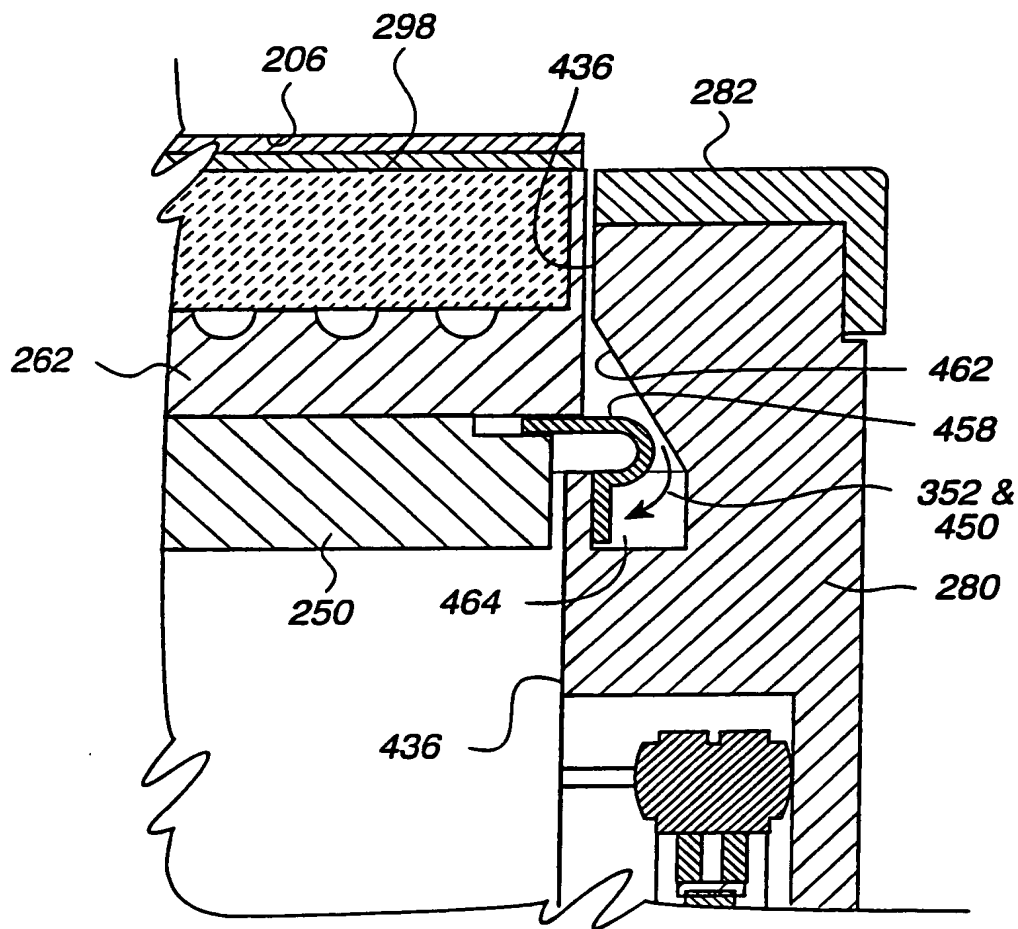


FIG. 13B

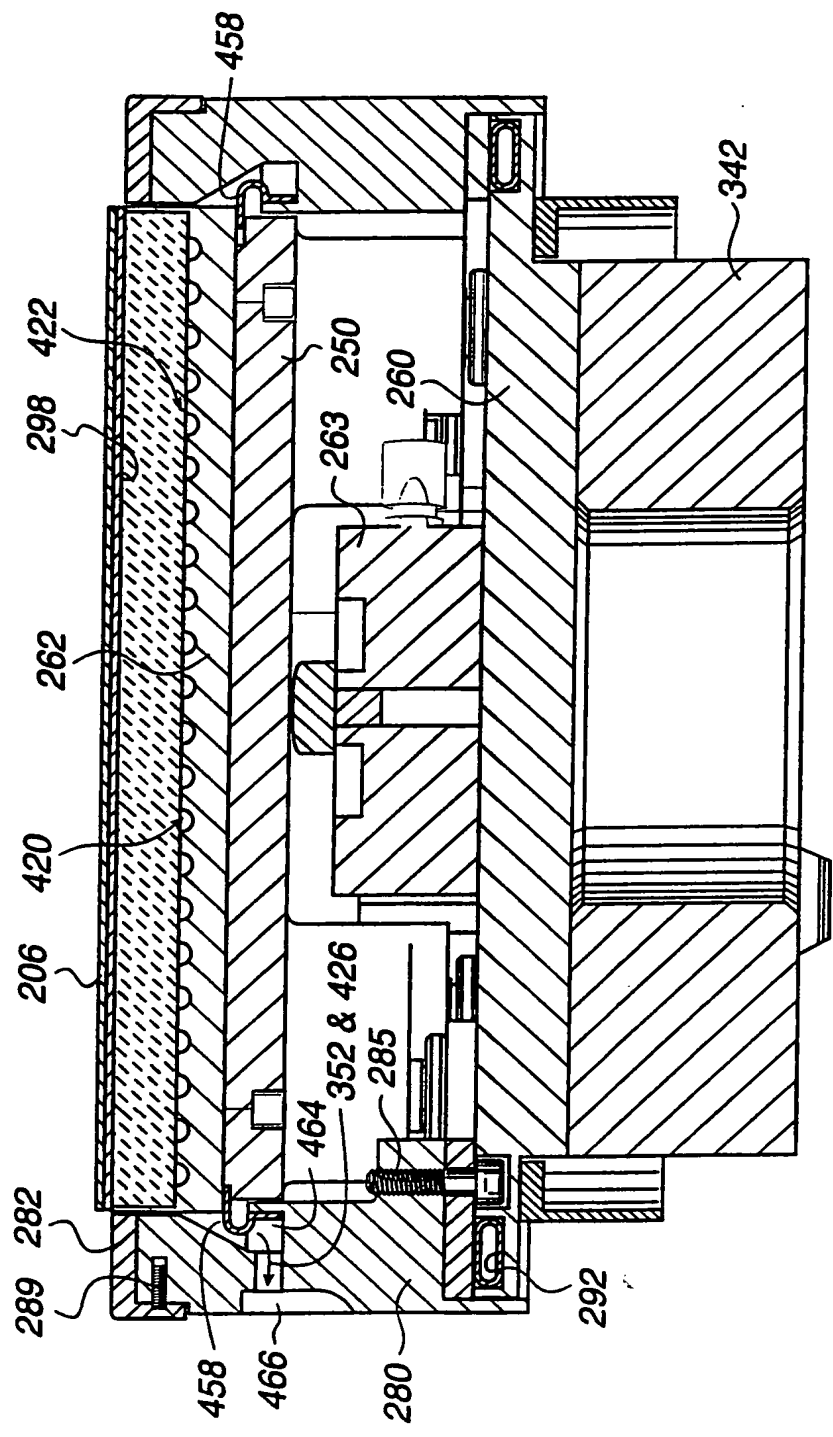
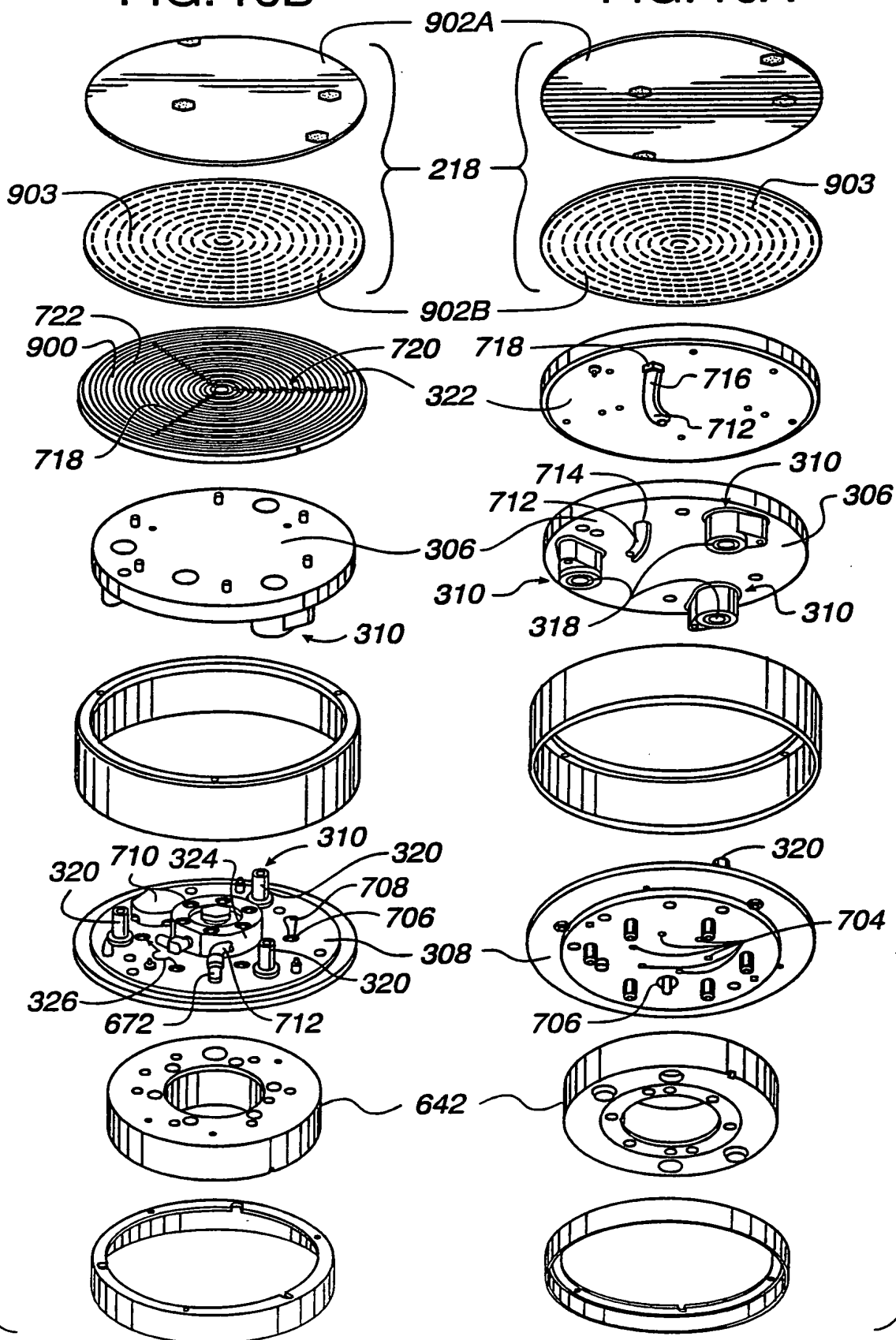


FIG. 15

FIG. 16B

FIG. 16A



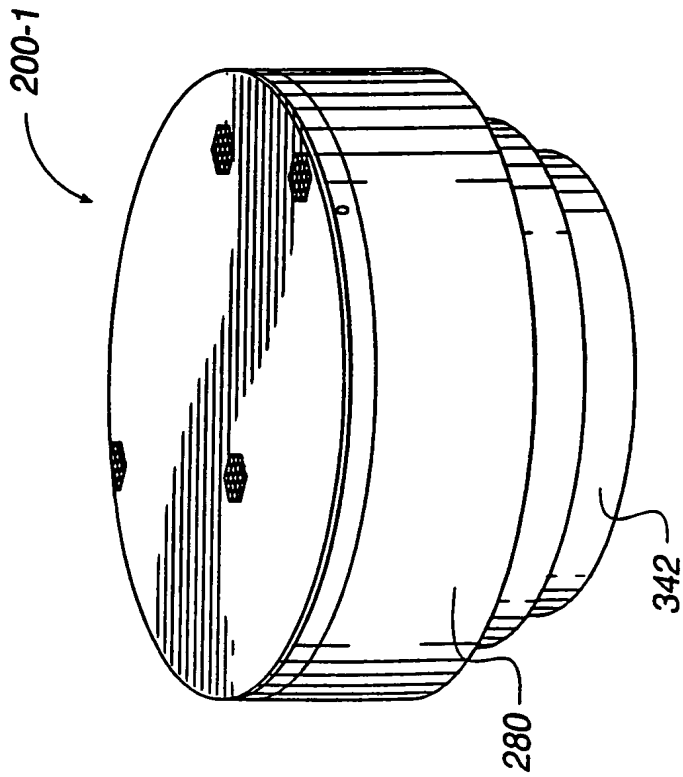


FIG. 17B

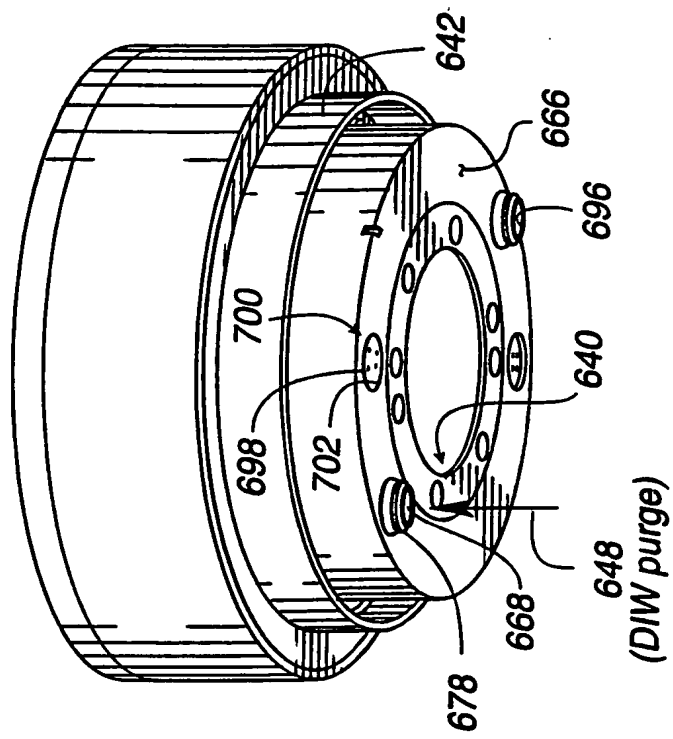


FIG. 17A

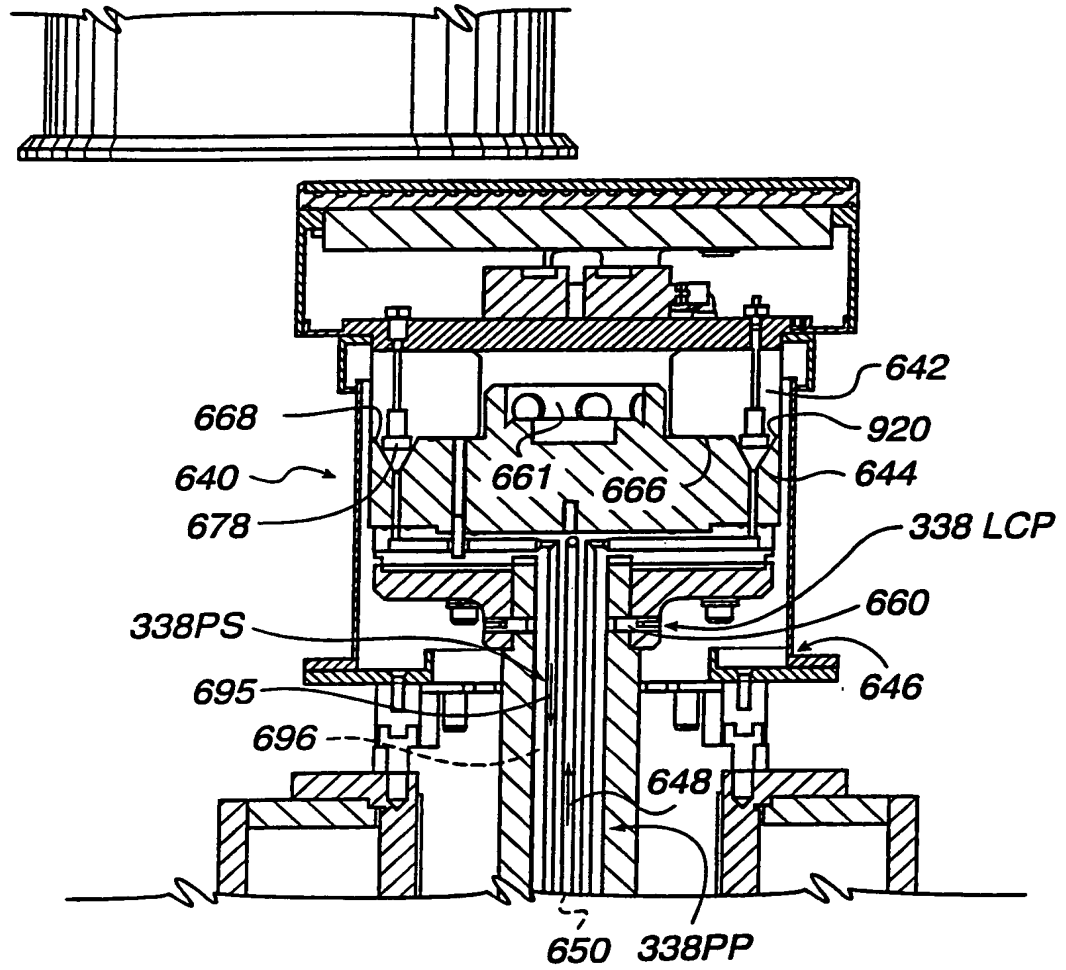


FIG. 17C

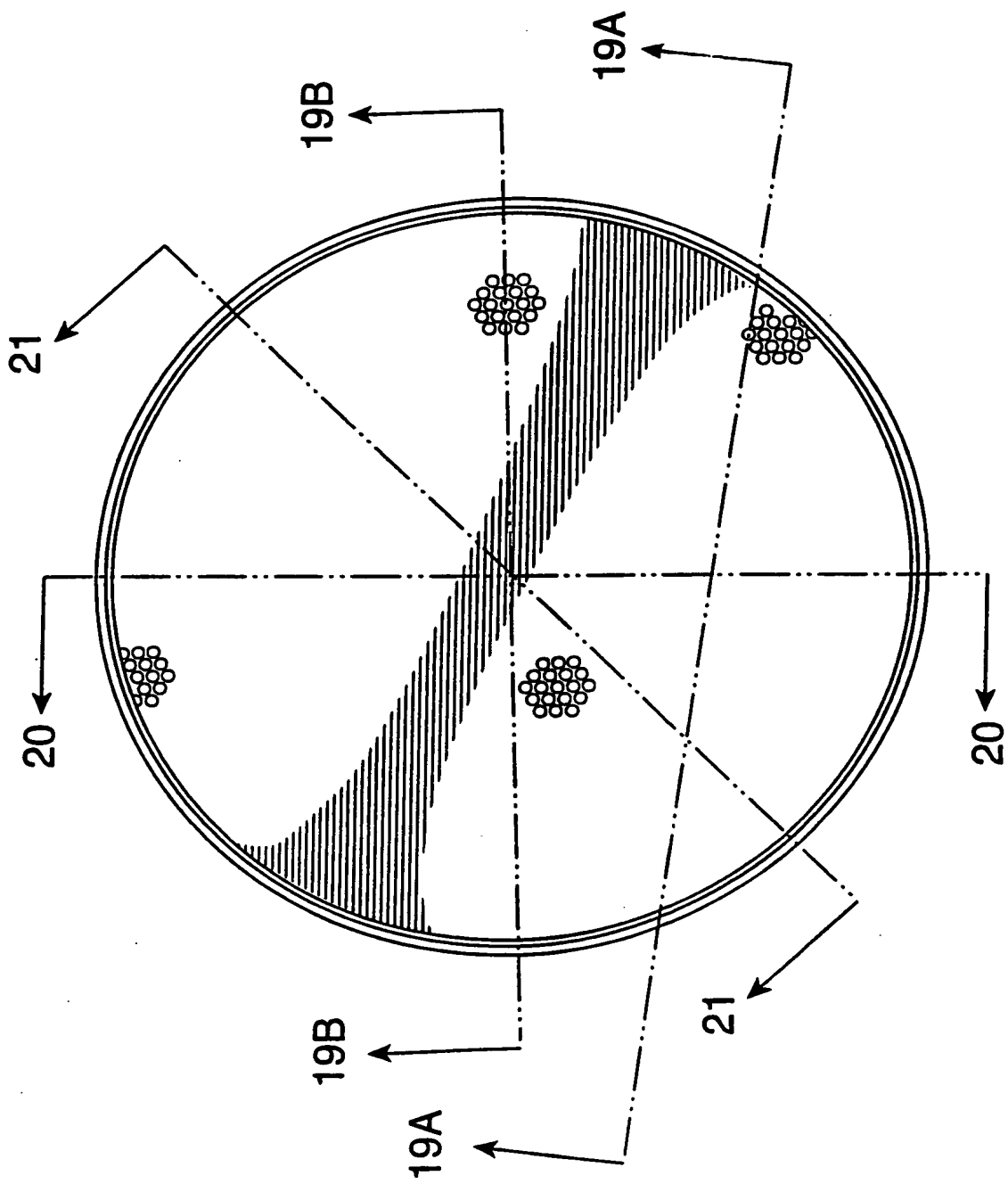


FIG. 18

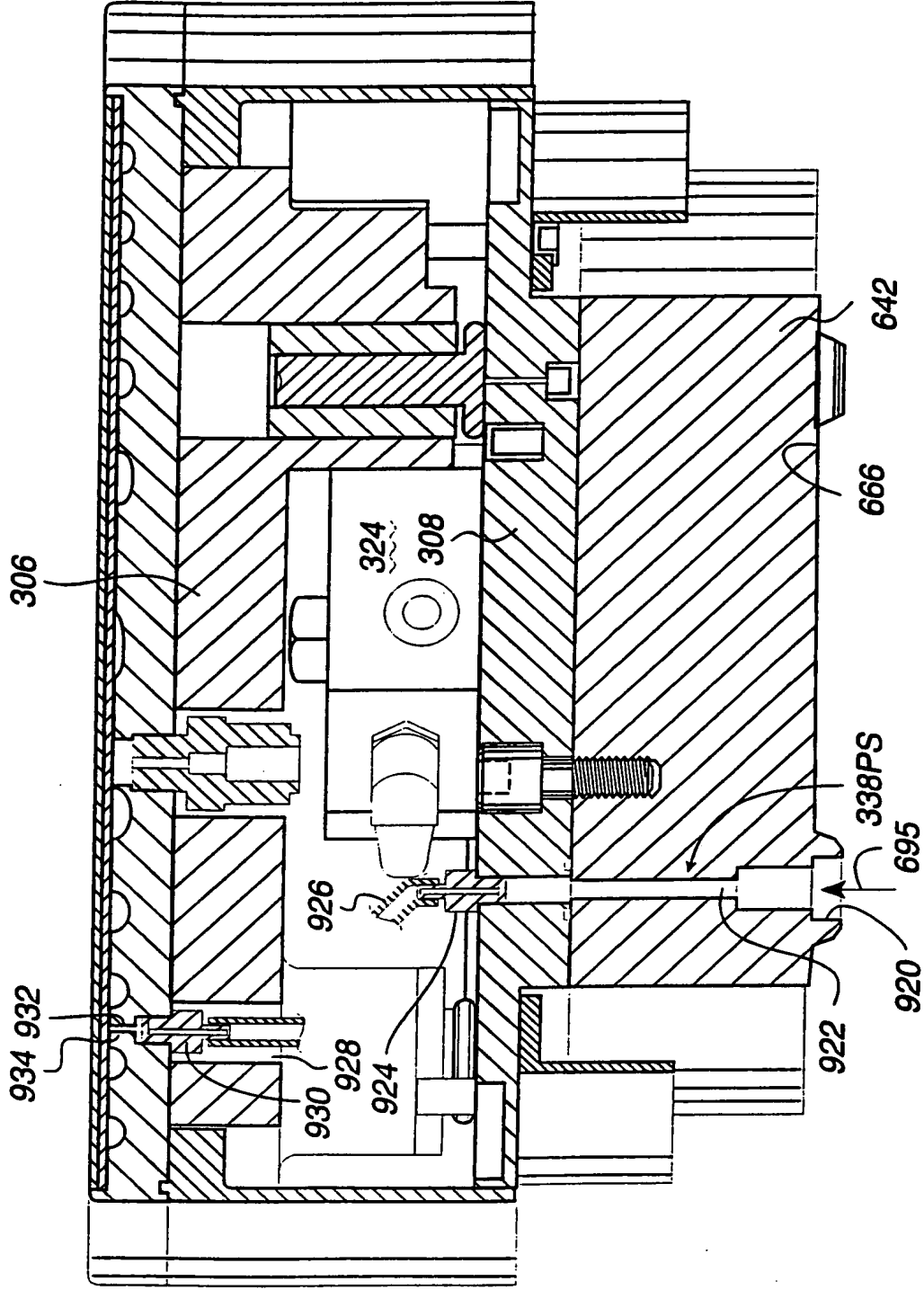


FIG. 19A

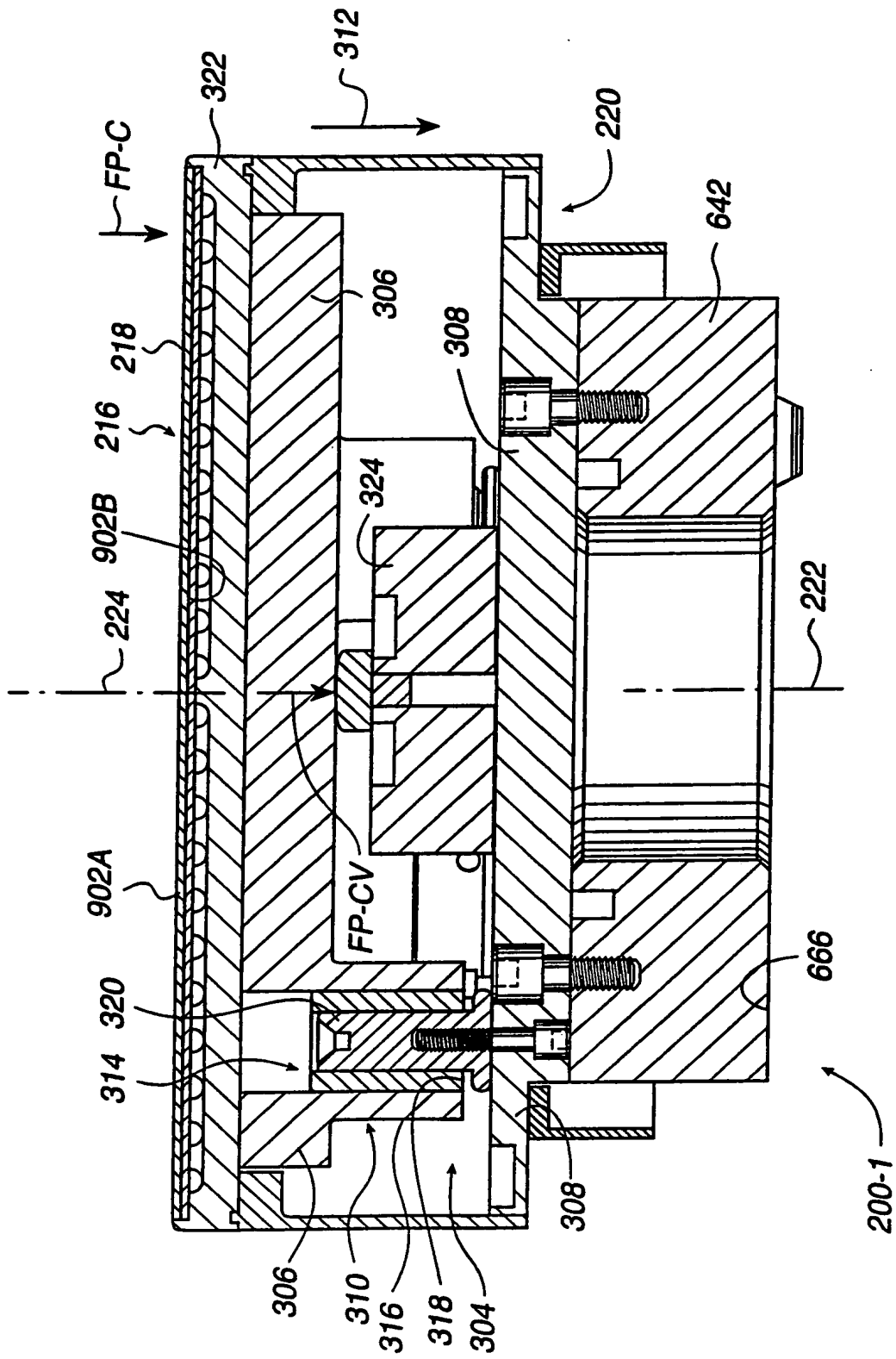


FIG. 19B

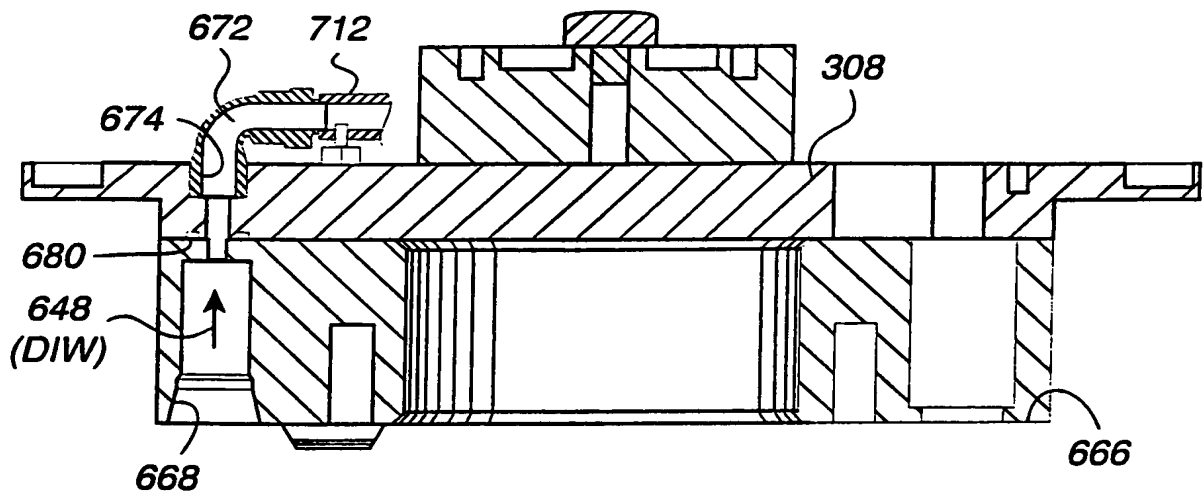


FIG. 20

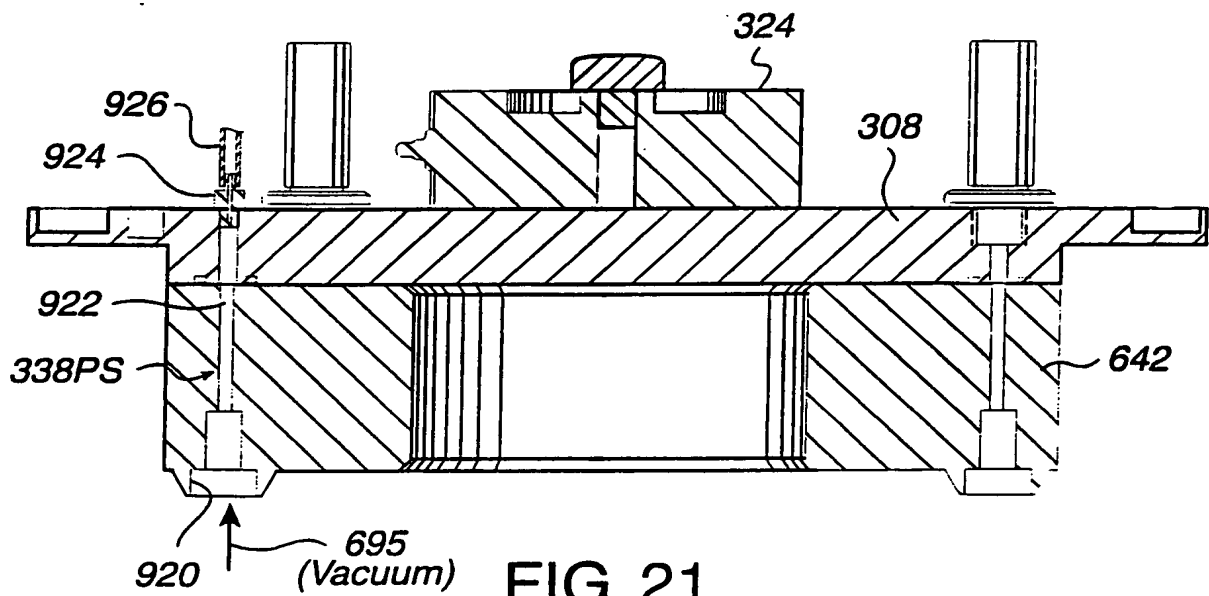


FIG. 21

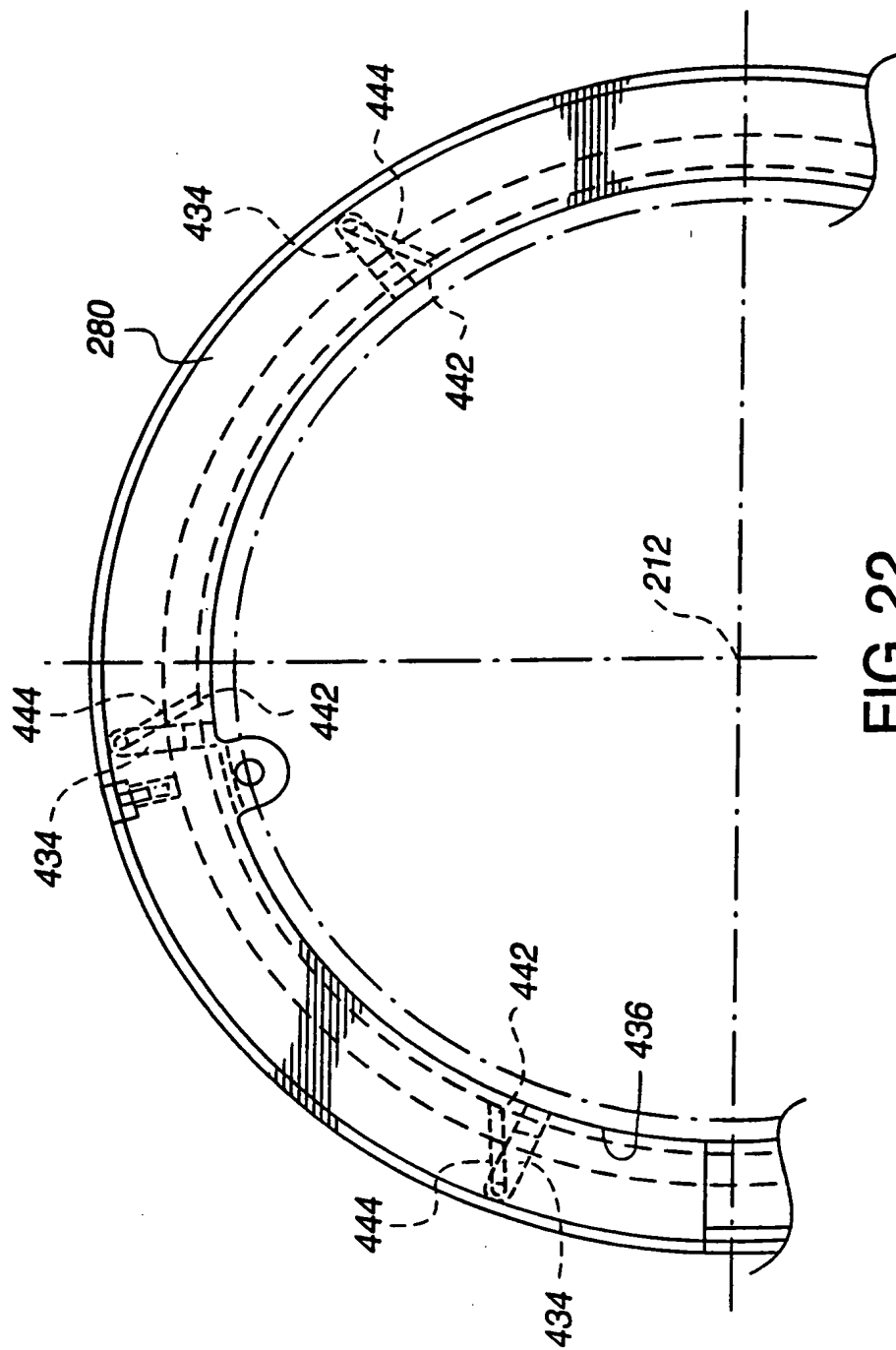


FIG. 22

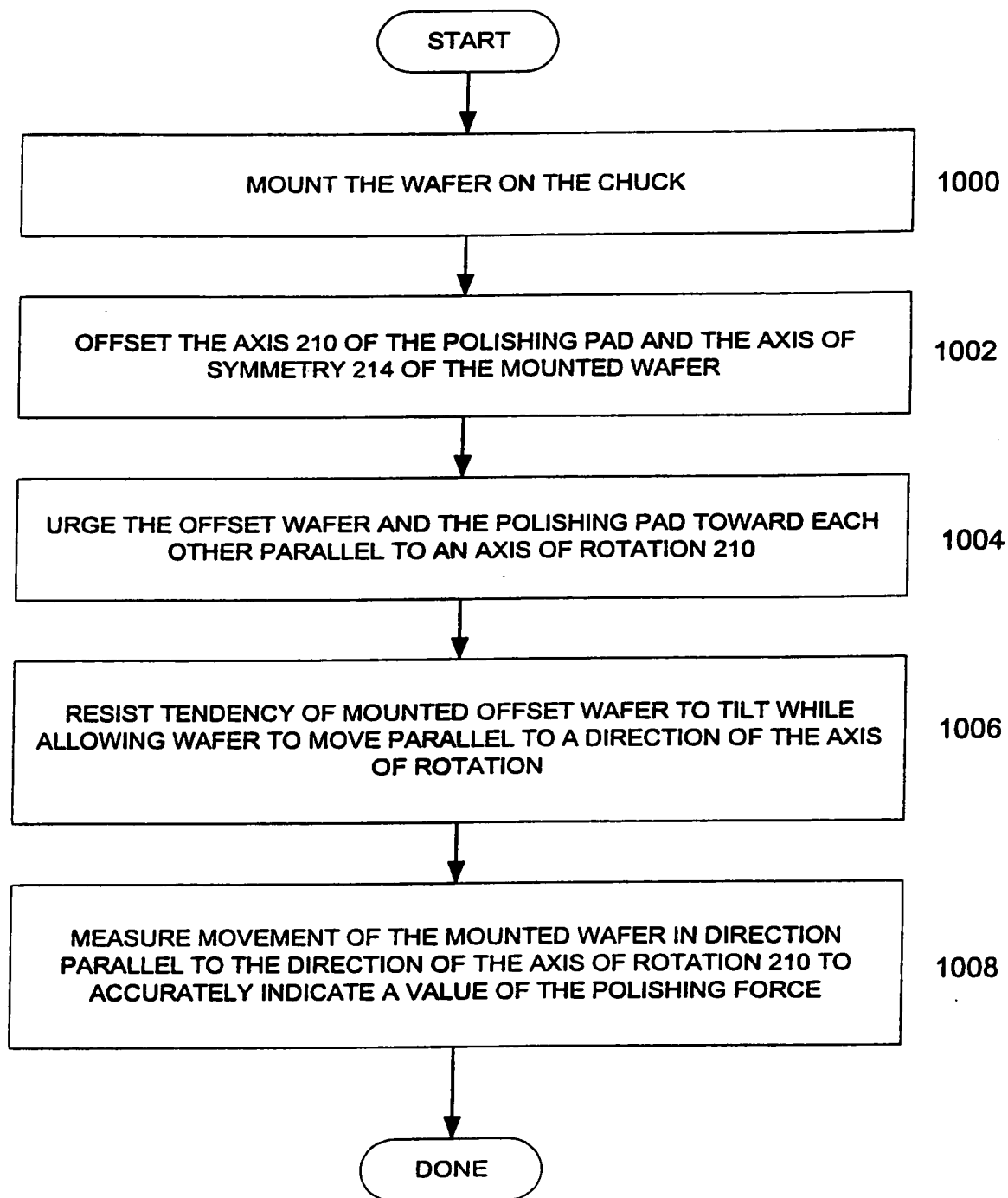


FIGURE 23

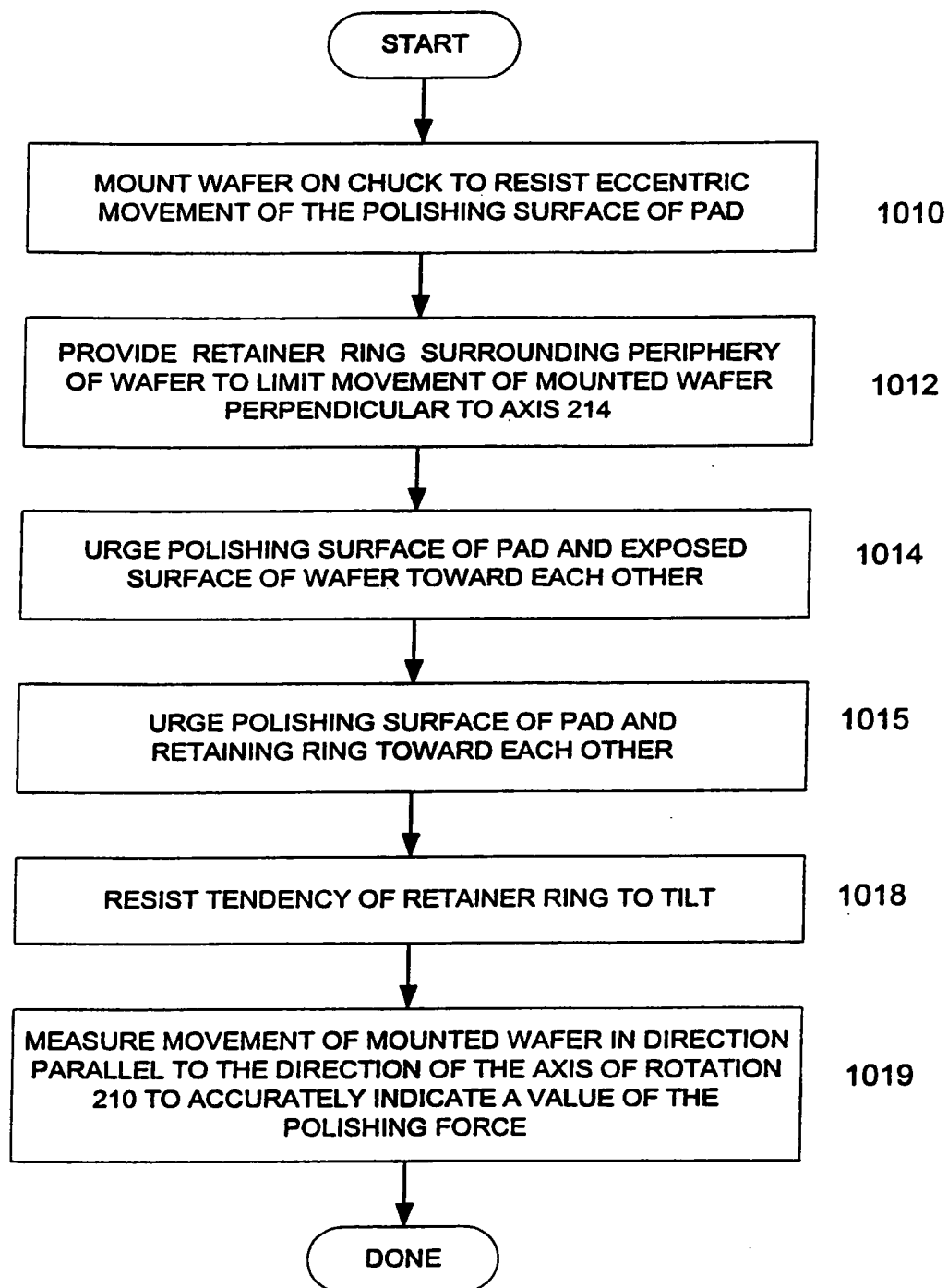


FIGURE 24

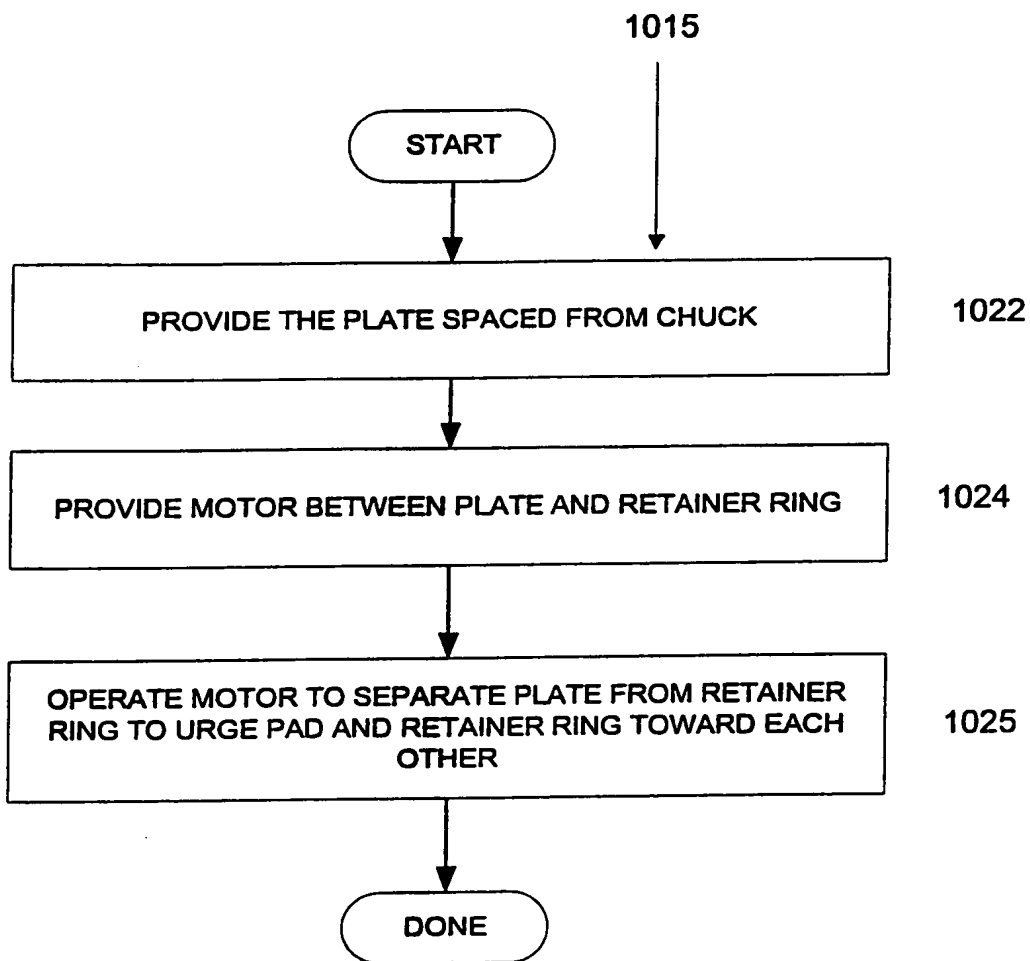


FIGURE 25

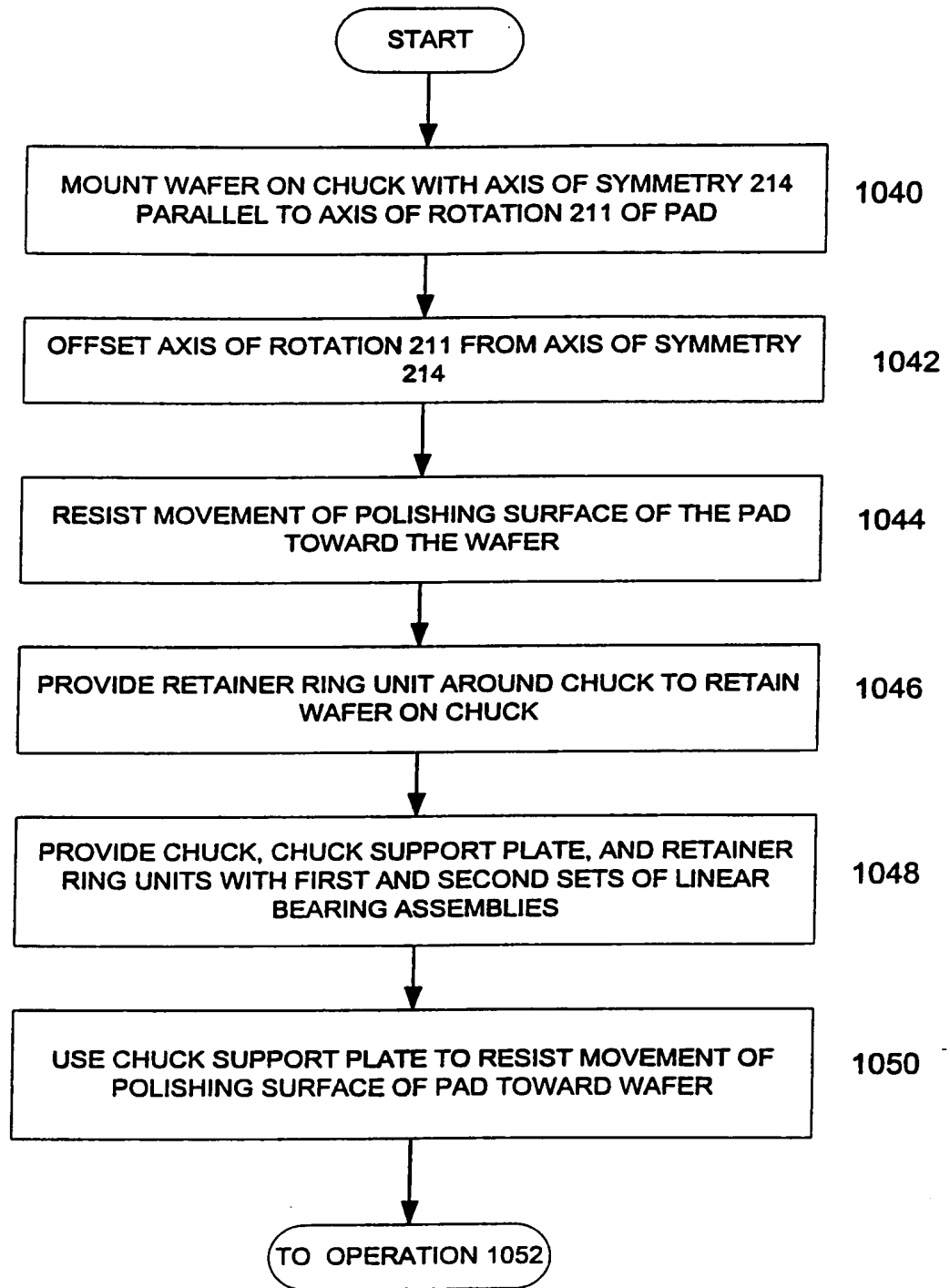


FIGURE 26

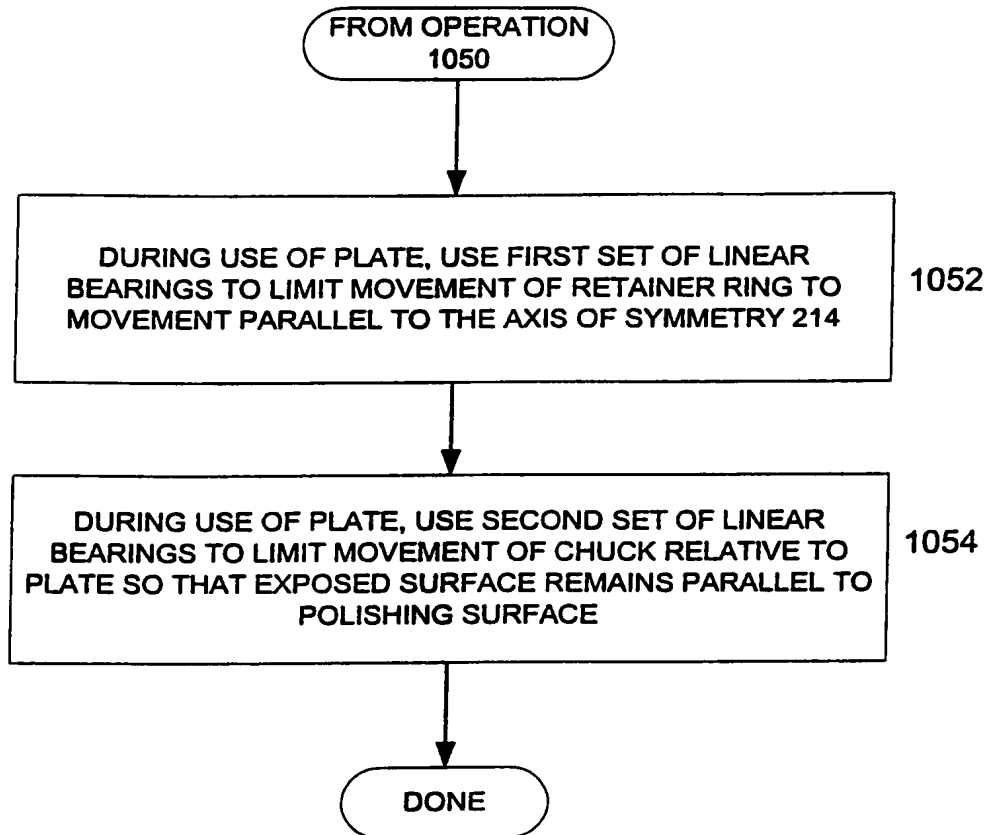


FIGURE 27

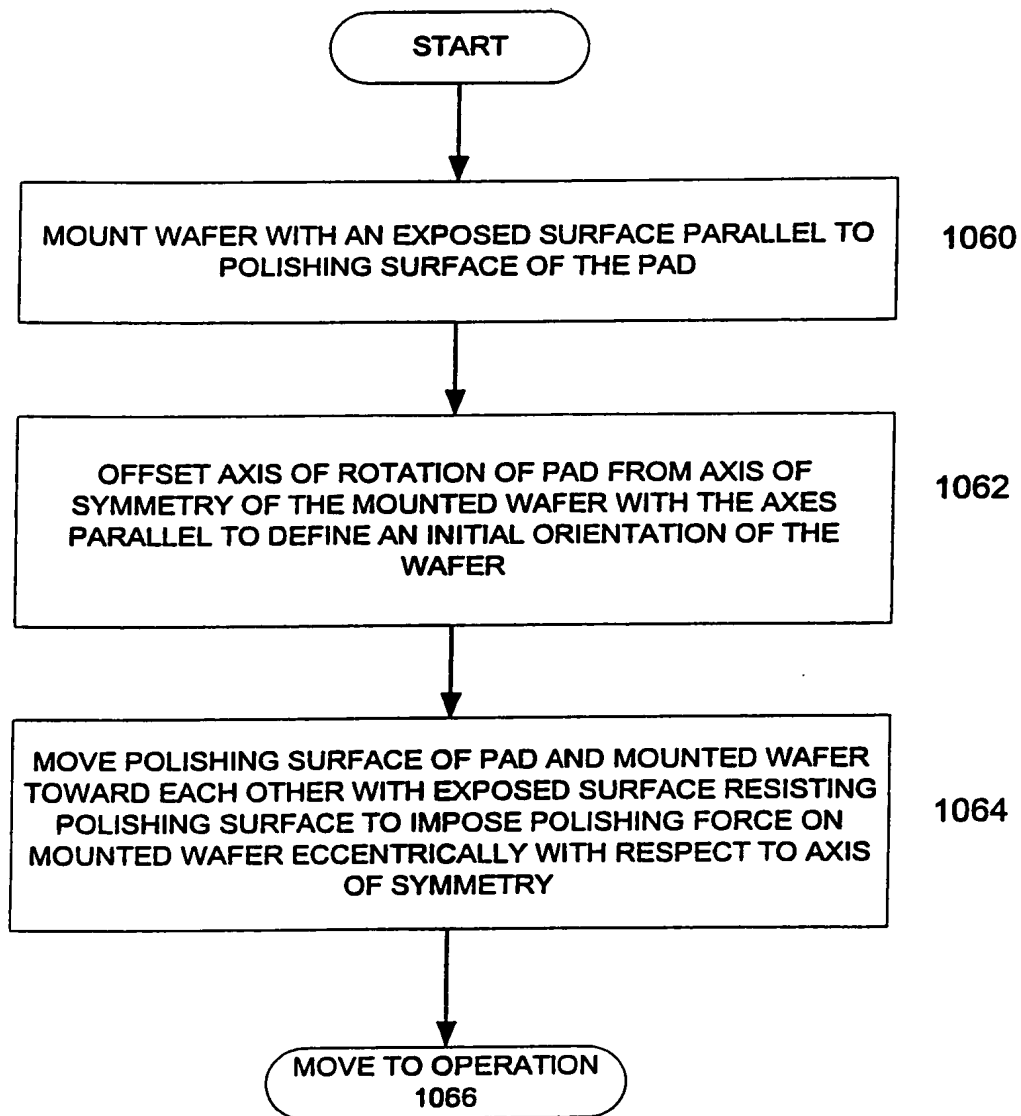


FIGURE 28

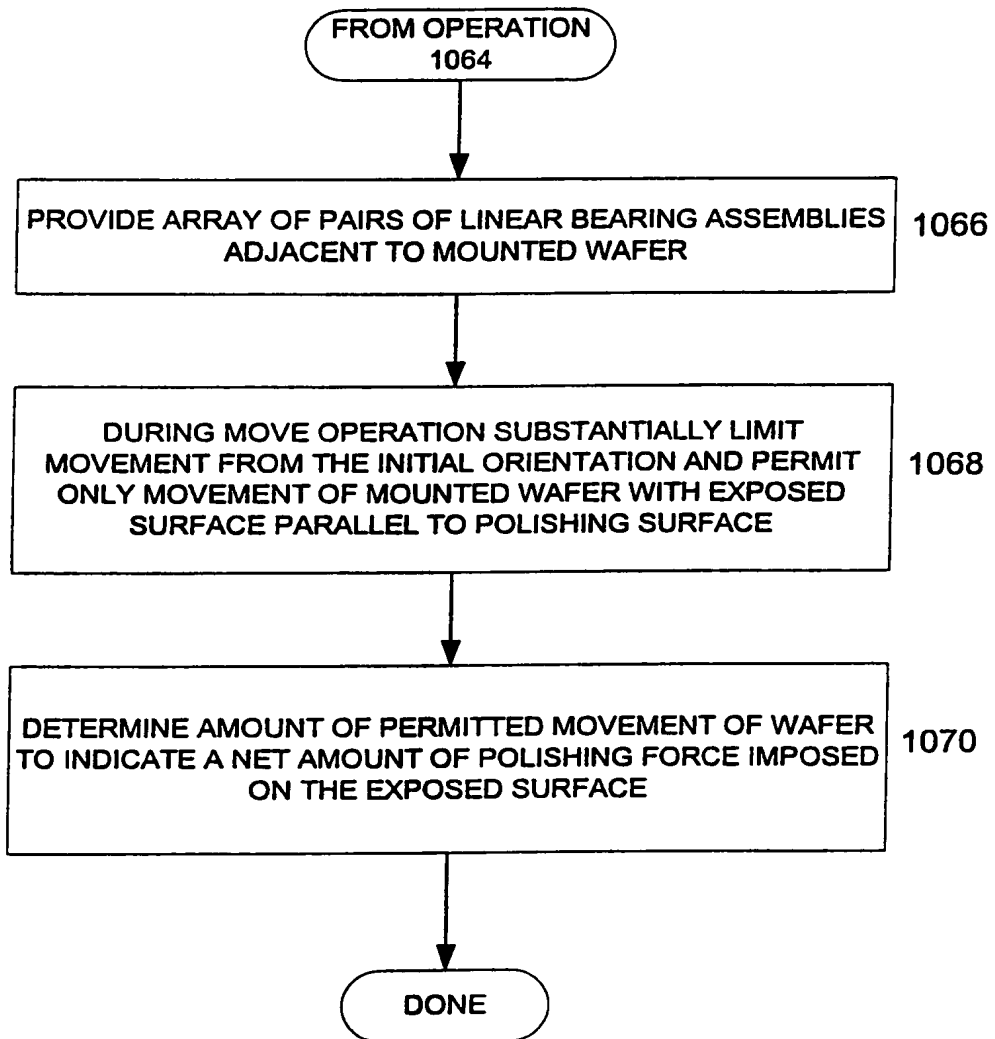


FIGURE 29

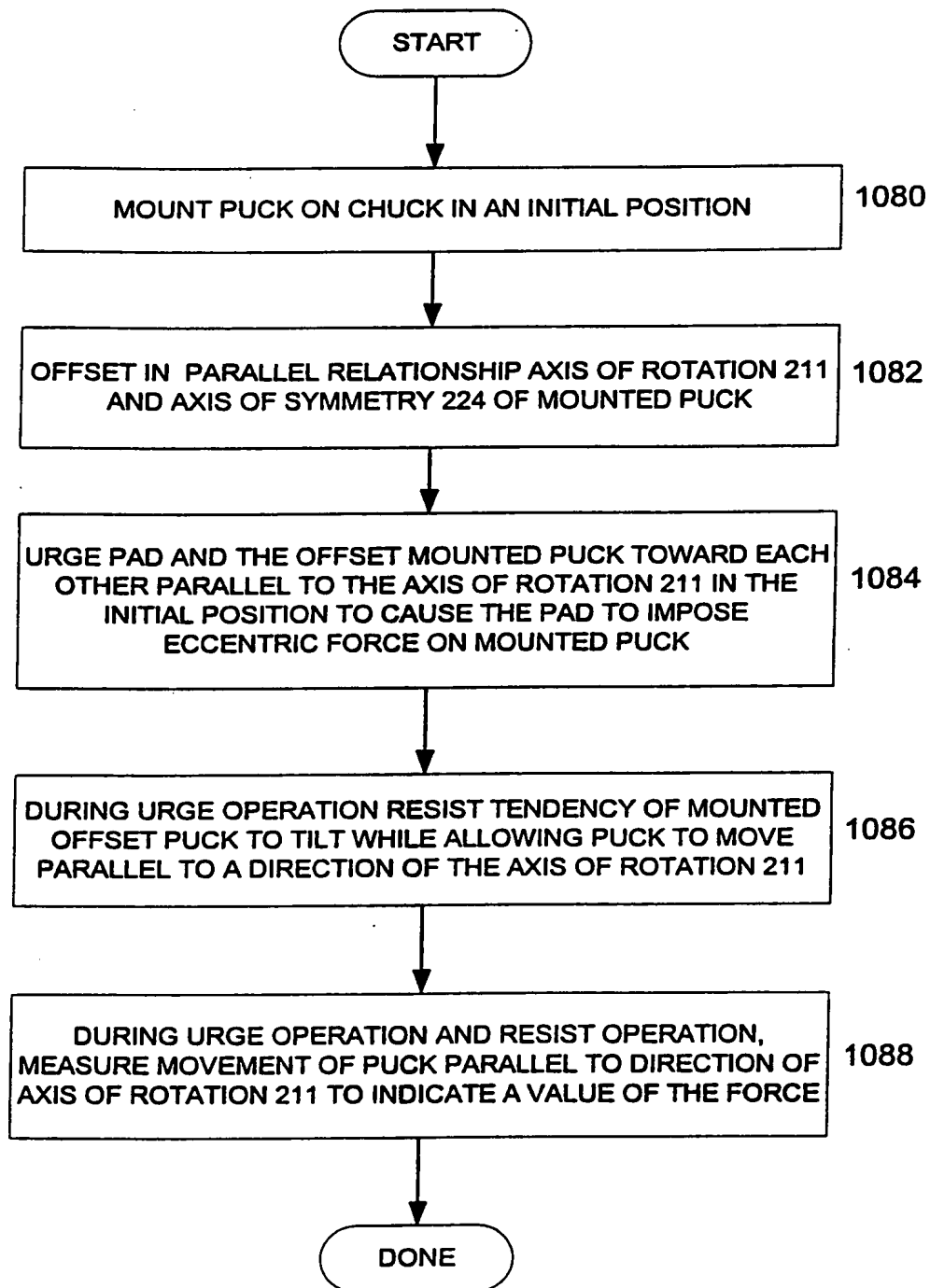


FIGURE 30

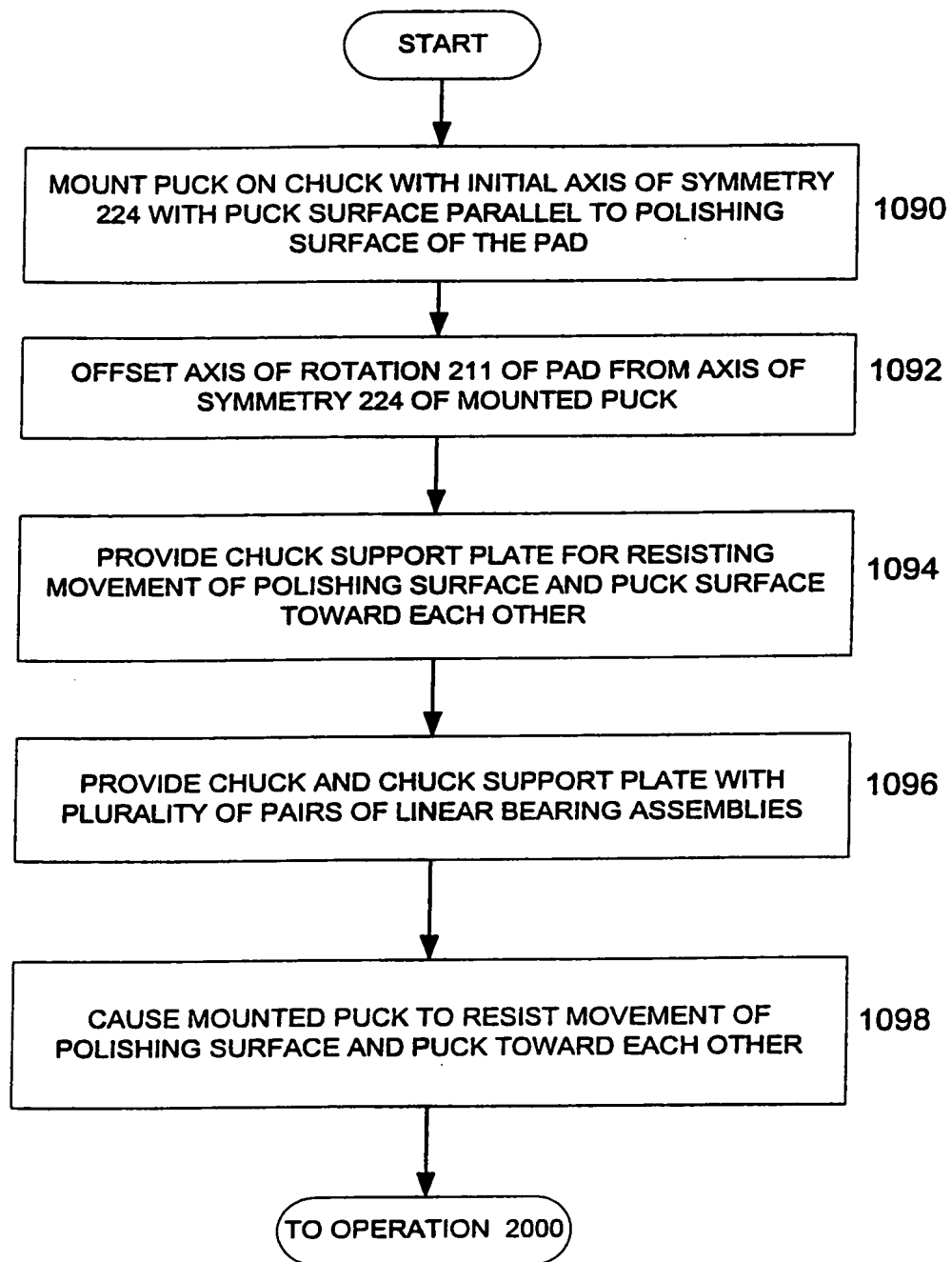


FIGURE 31

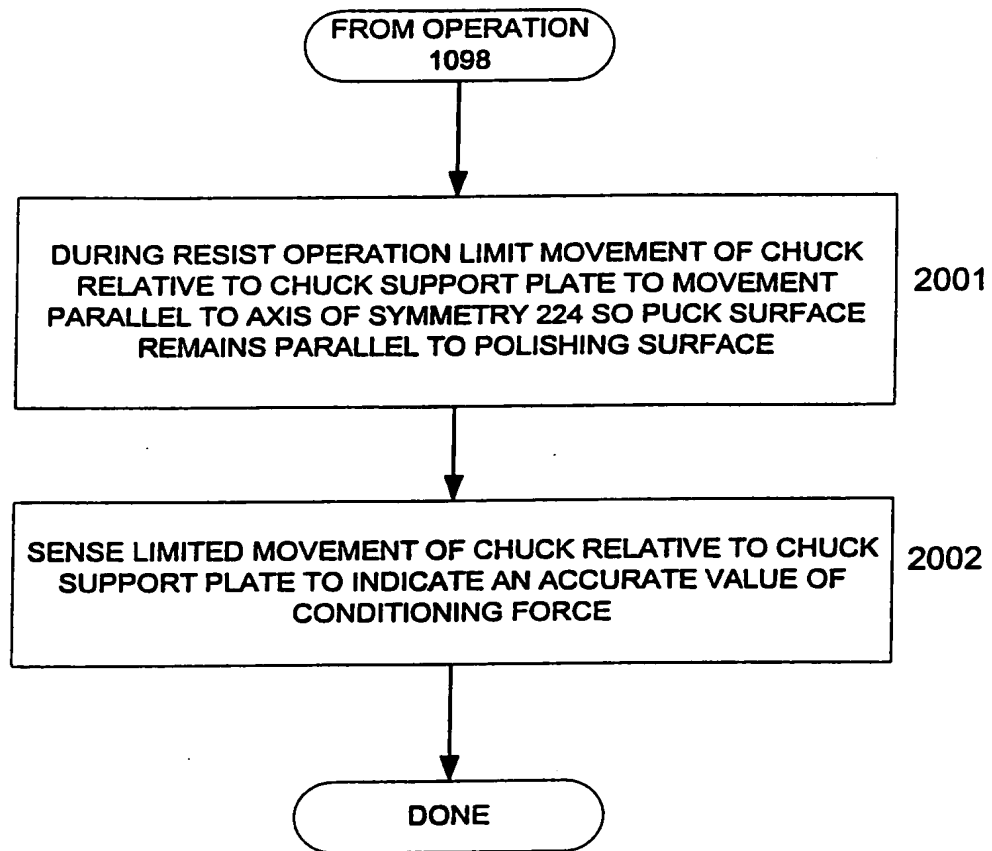


FIGURE 32

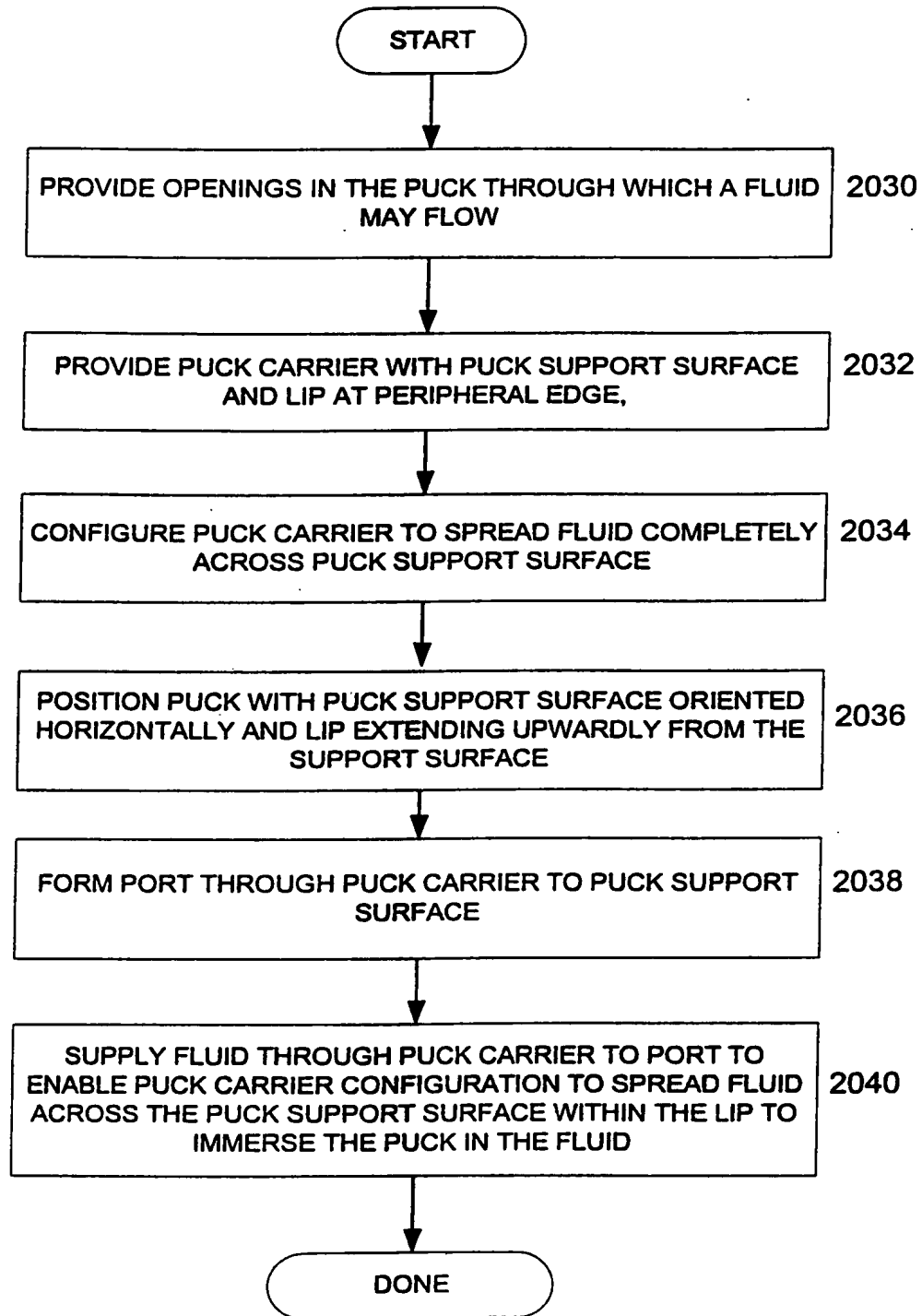


FIGURE 33

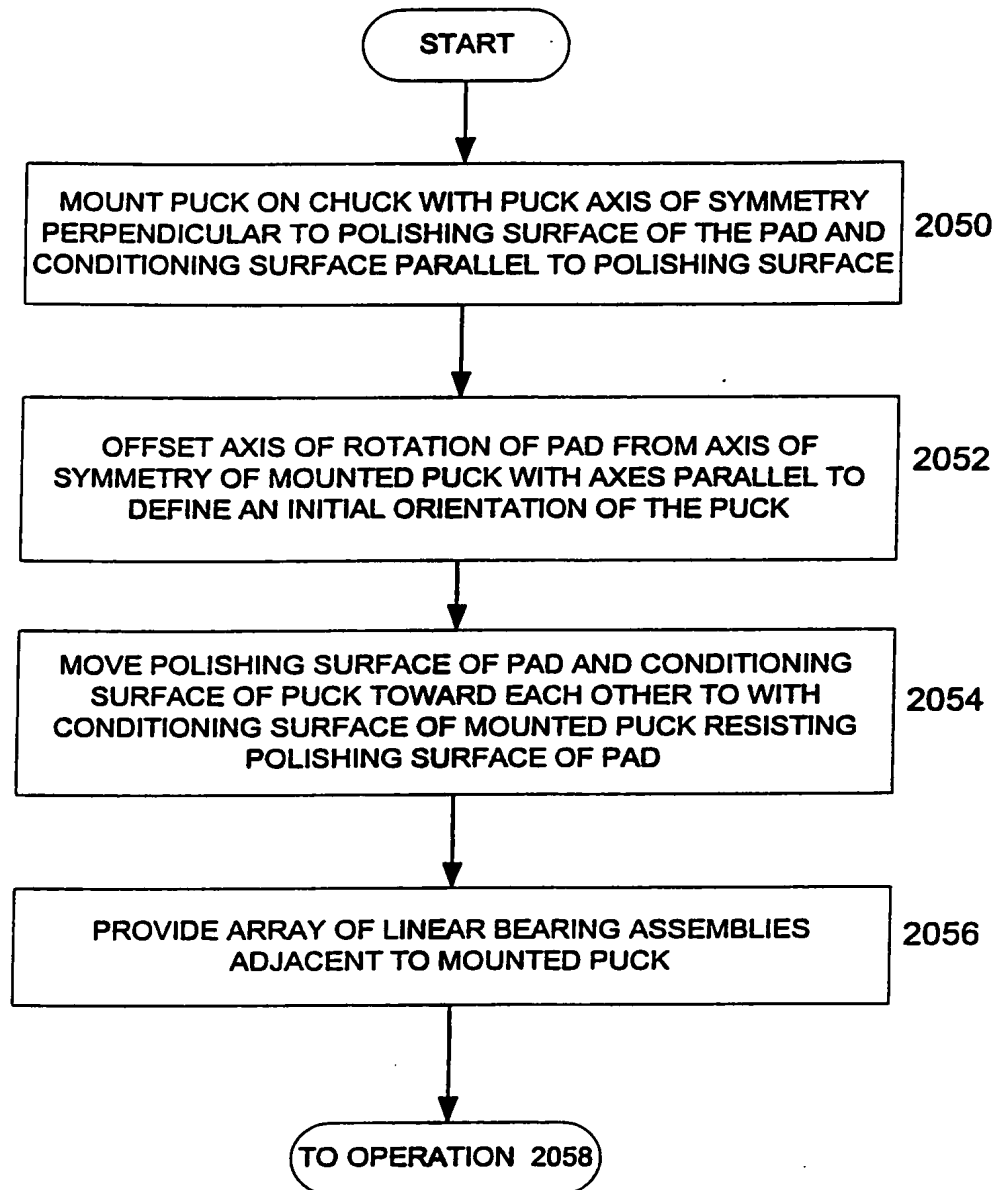


FIGURE 34

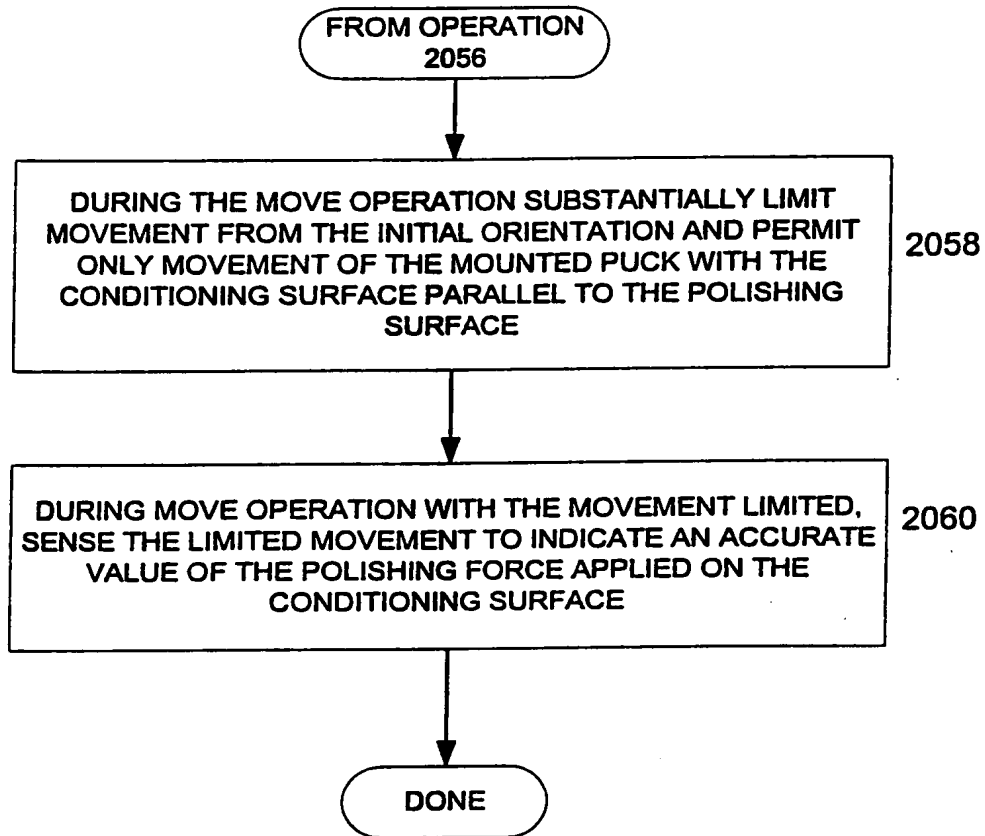


FIGURE 35

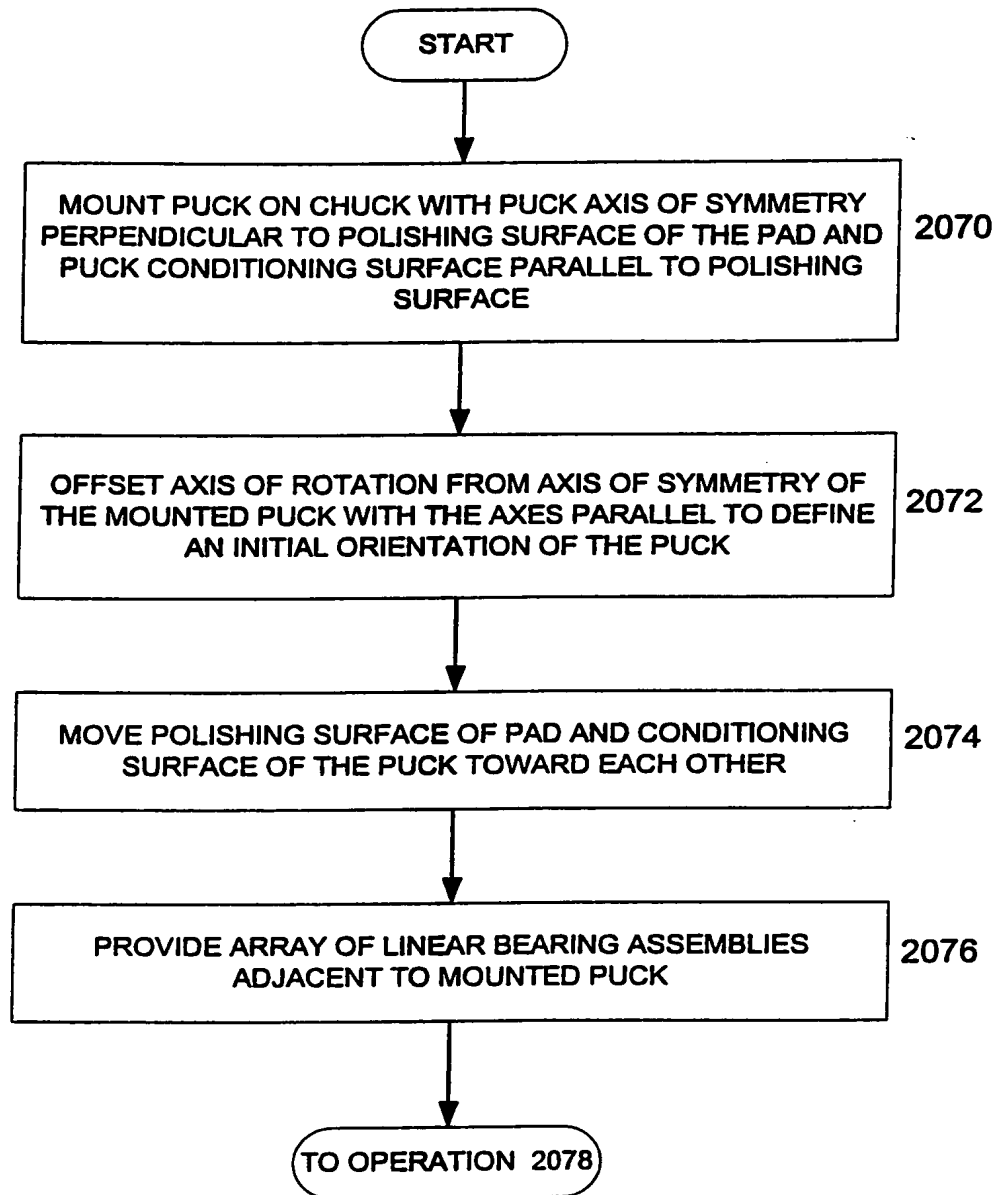


FIGURE 36

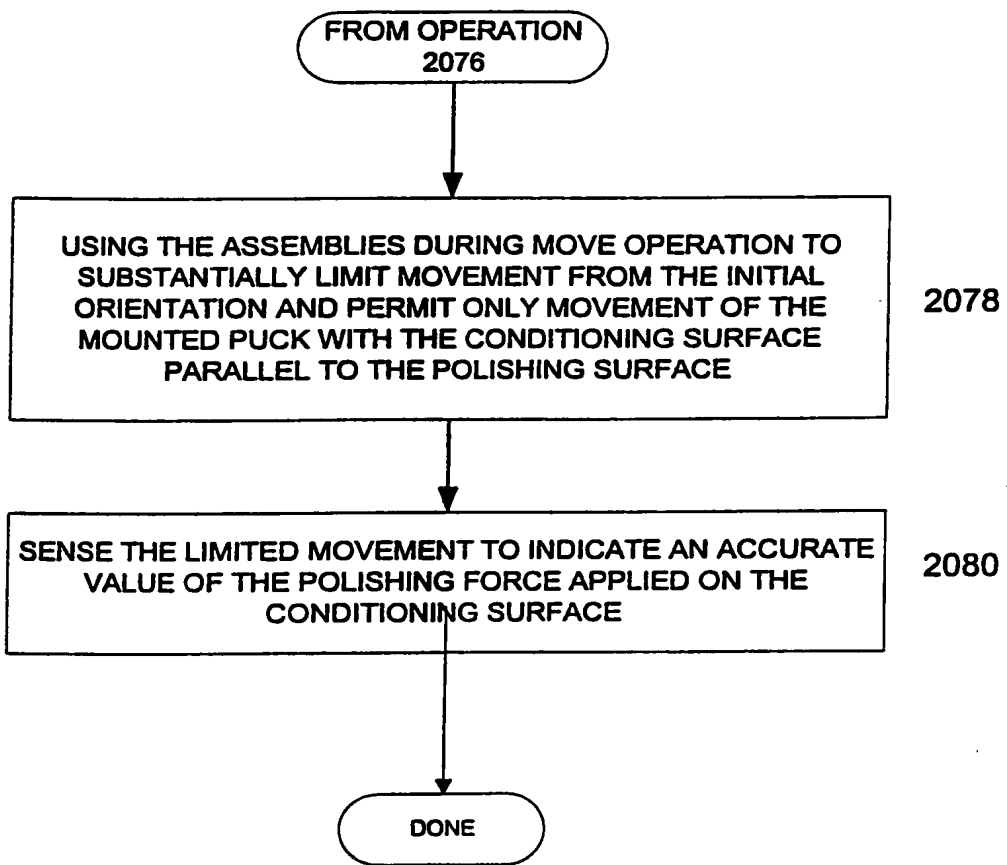


FIGURE 37

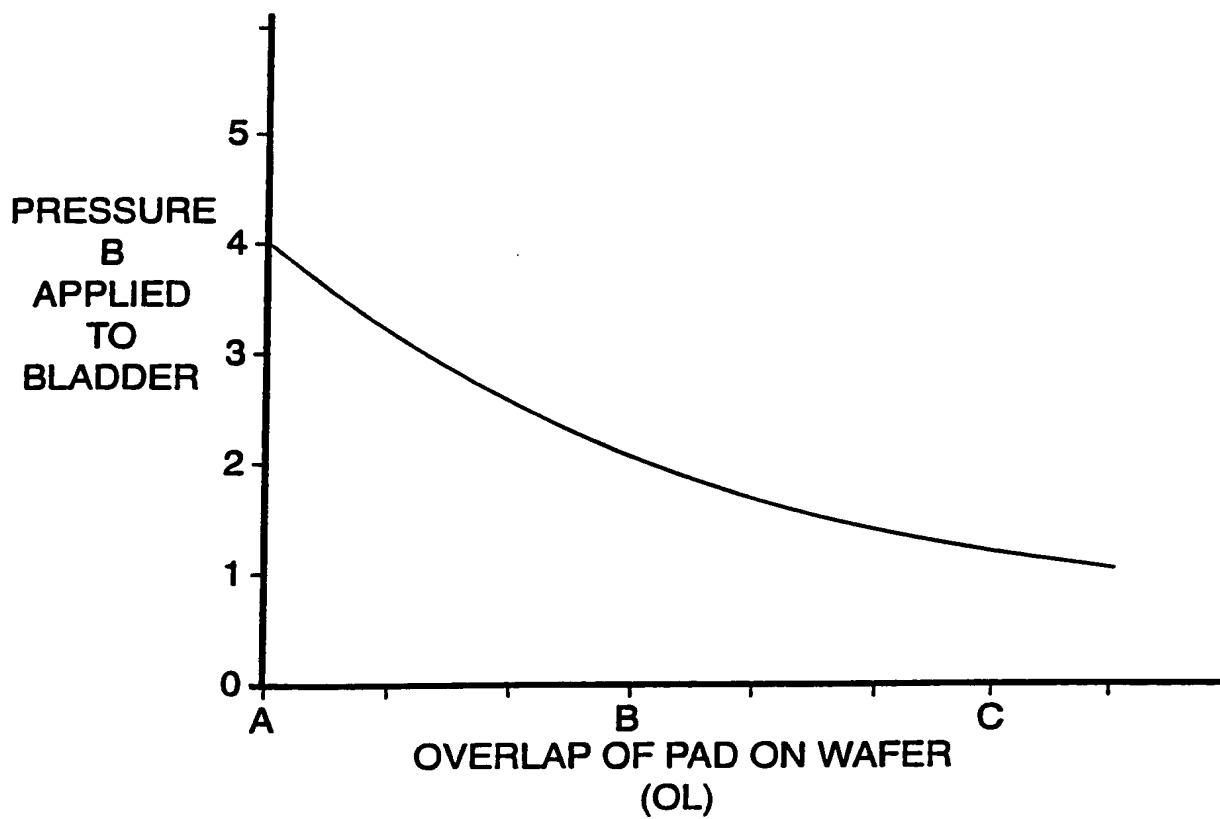
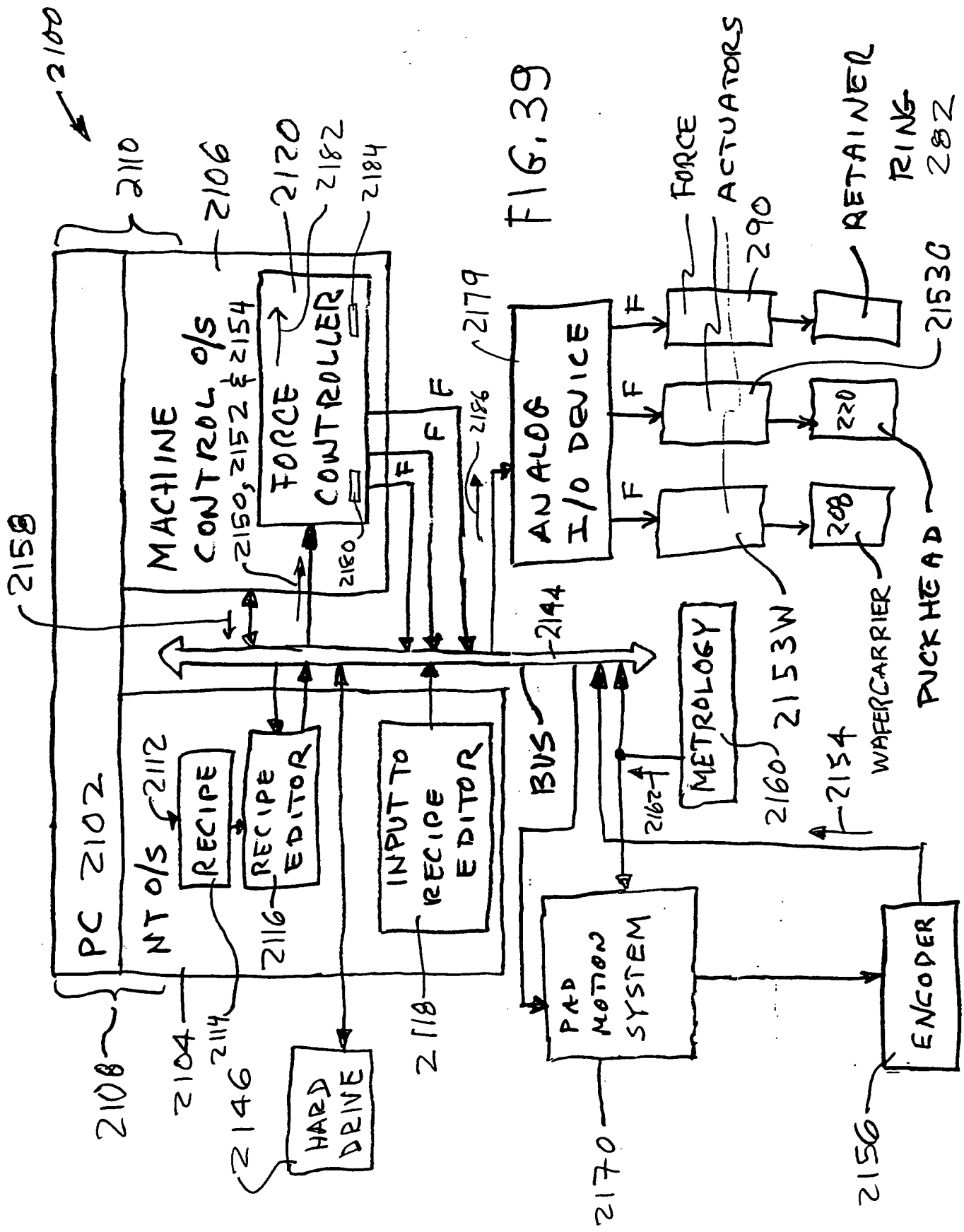
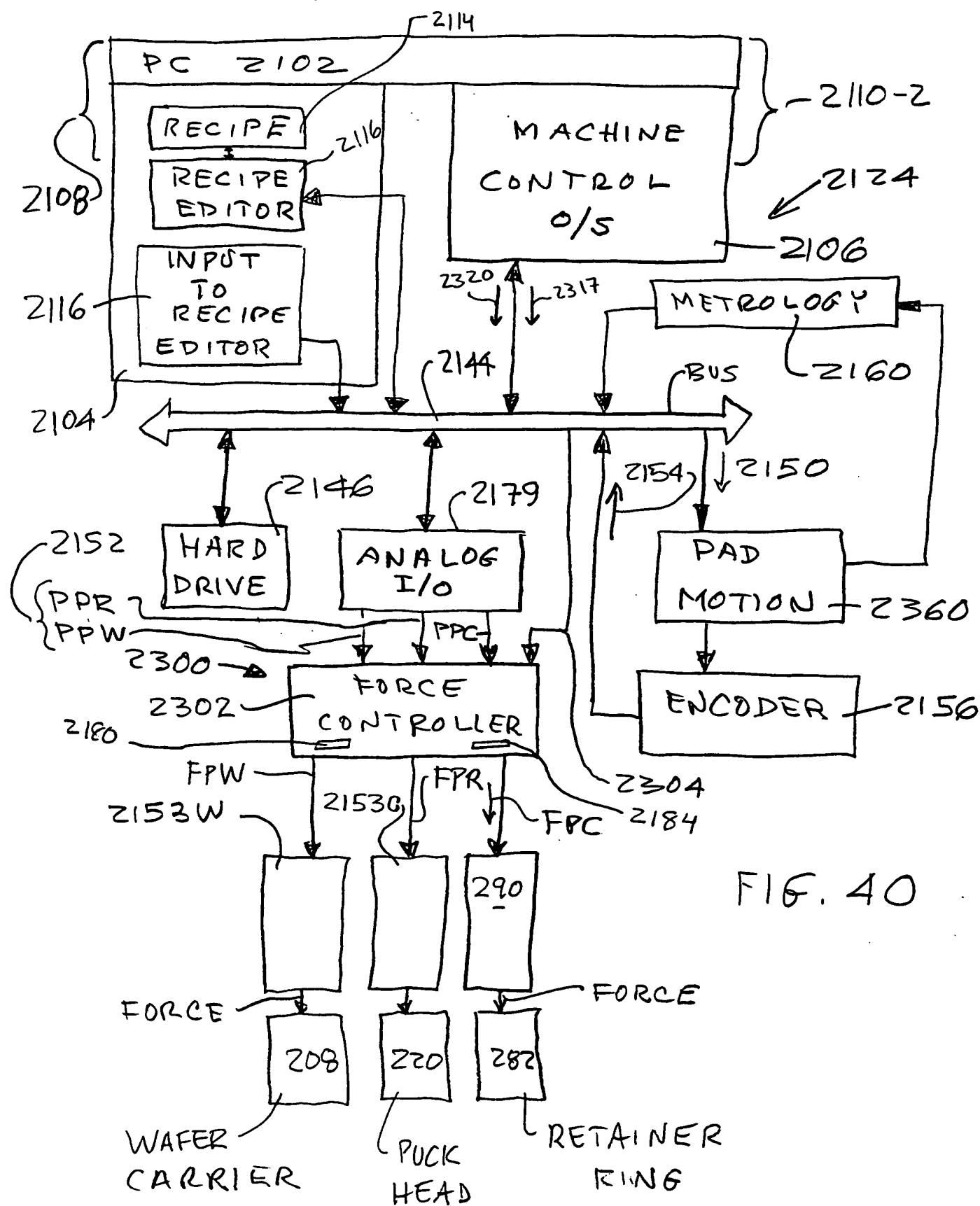


FIG. 38

FIG. 39 is a block diagram of a system for controlling a wafer carrier. The system includes a PC 2102, a hard drive 2146, a recipe editor 2116, an input to recipe editor 2118, a machine control 2106, a force controller 2120, an analog I/O device 2144, a metrology 2160, a wafer carrier 2154, a puck head 2153, and force actuators 290. The PC 2102 is connected to the hard drive 2146 and the recipe editor 2116. The recipe editor 2116 is connected to the input to recipe editor 2118. The input to recipe editor 2118 is connected to the machine control 2106. The machine control 2106 is connected to the force controller 2120. The force controller 2120 is connected to the analog I/O device 2144. The analog I/O device 2144 is connected to the metrology 2160. The metrology 2160 is connected to the wafer carrier 2154. The wafer carrier 2154 is connected to the puck head 2153. The puck head 2153 is connected to the force actuators 290.





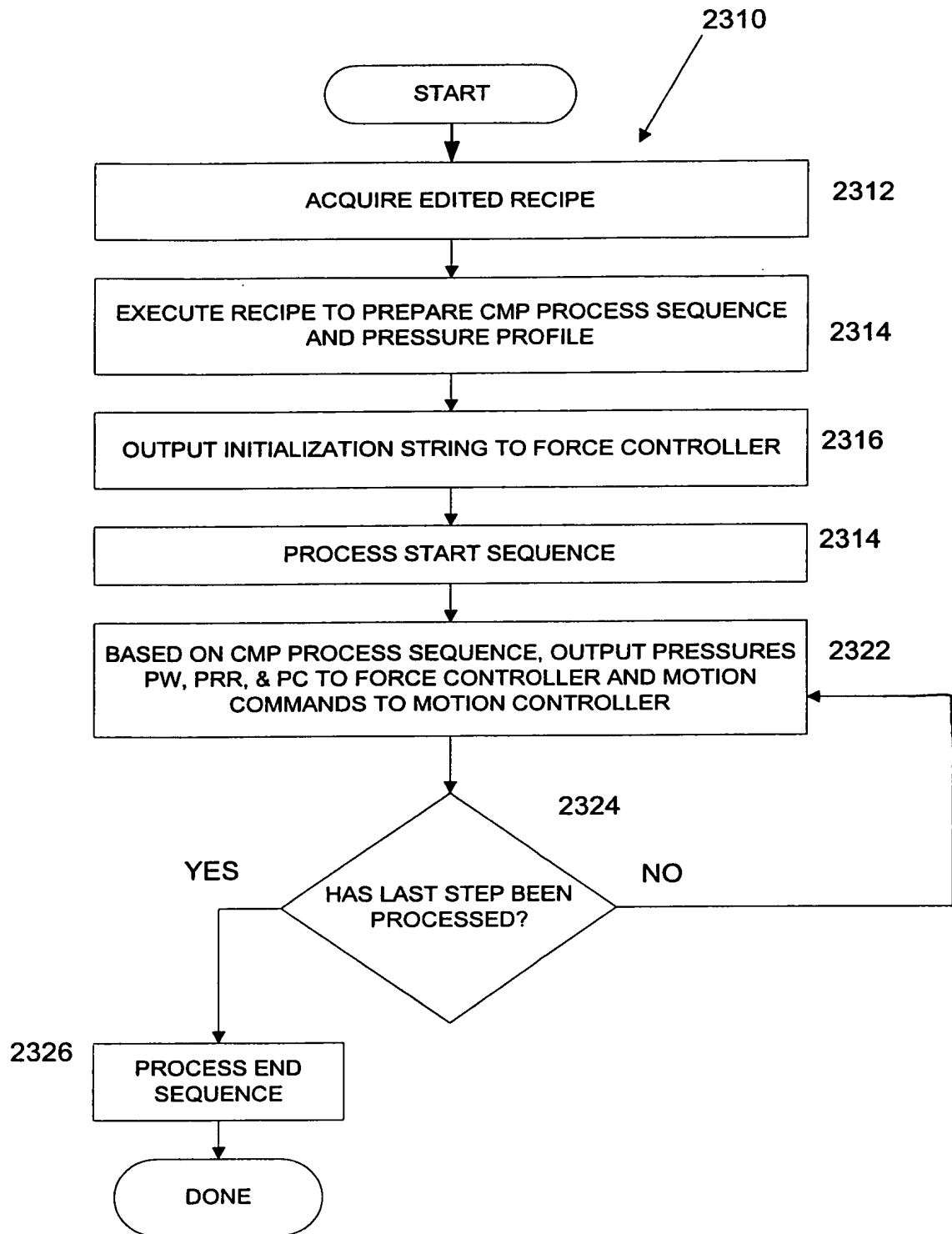


FIGURE 41

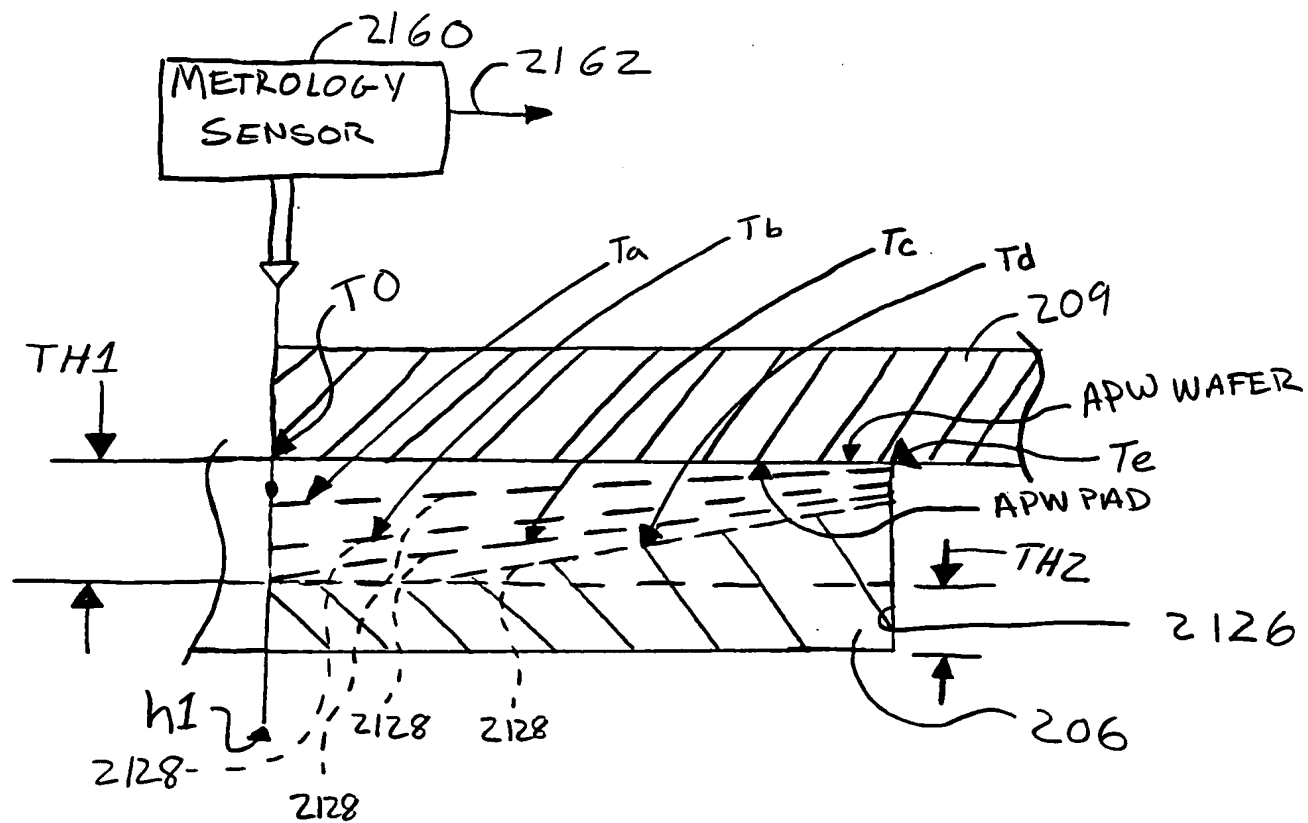


FIG. 42A

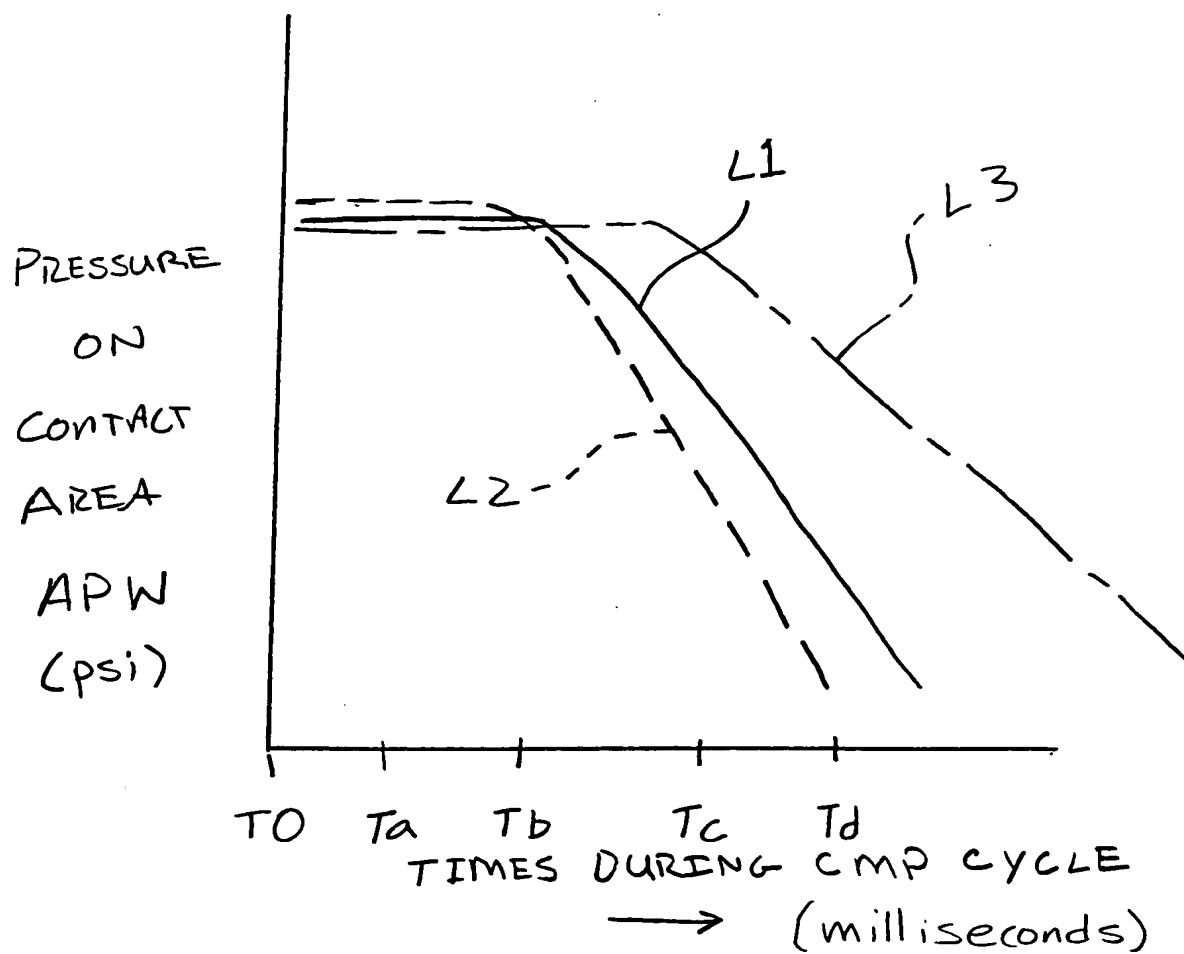


FIG. 42 B

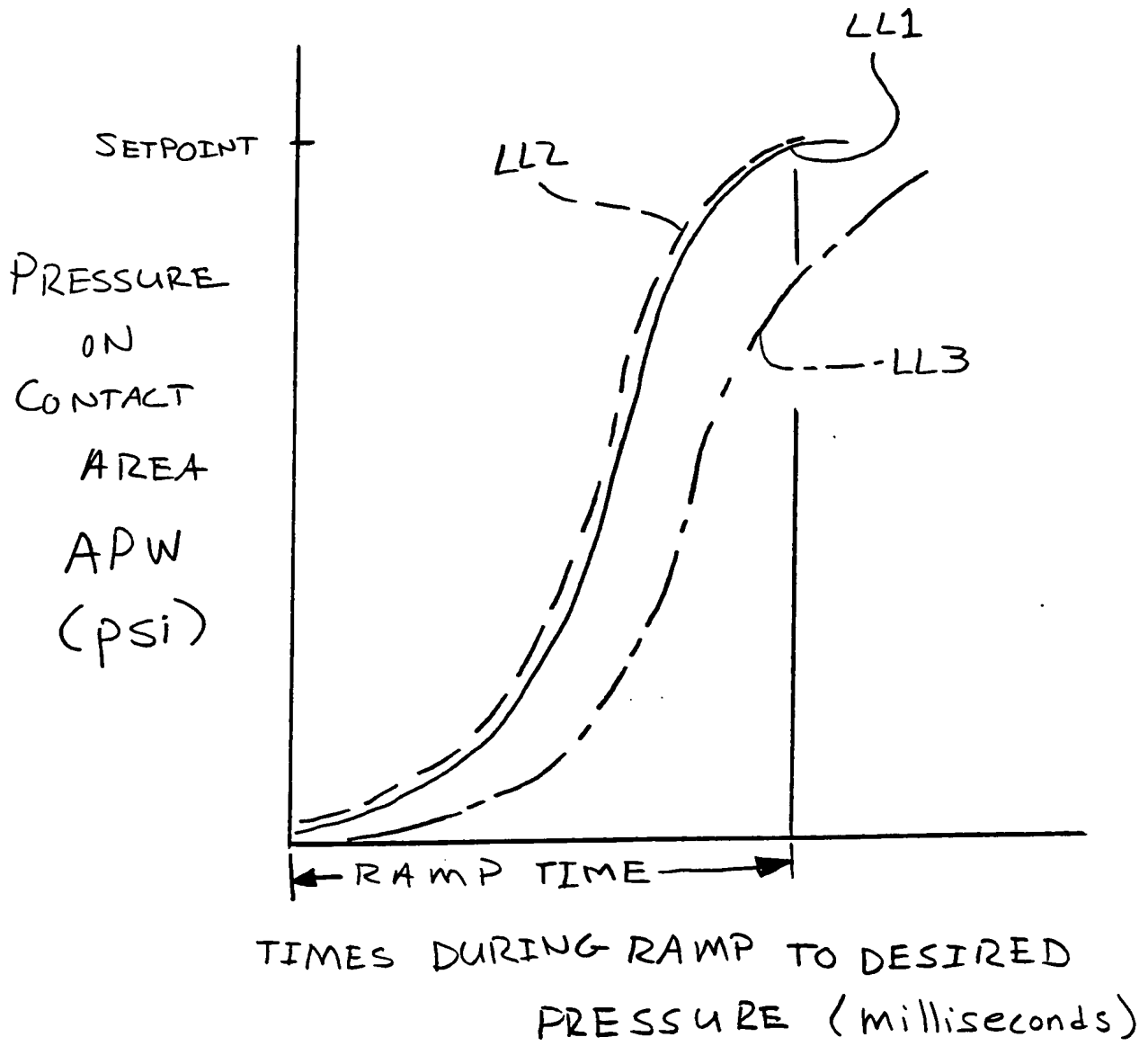


FIG. 42C

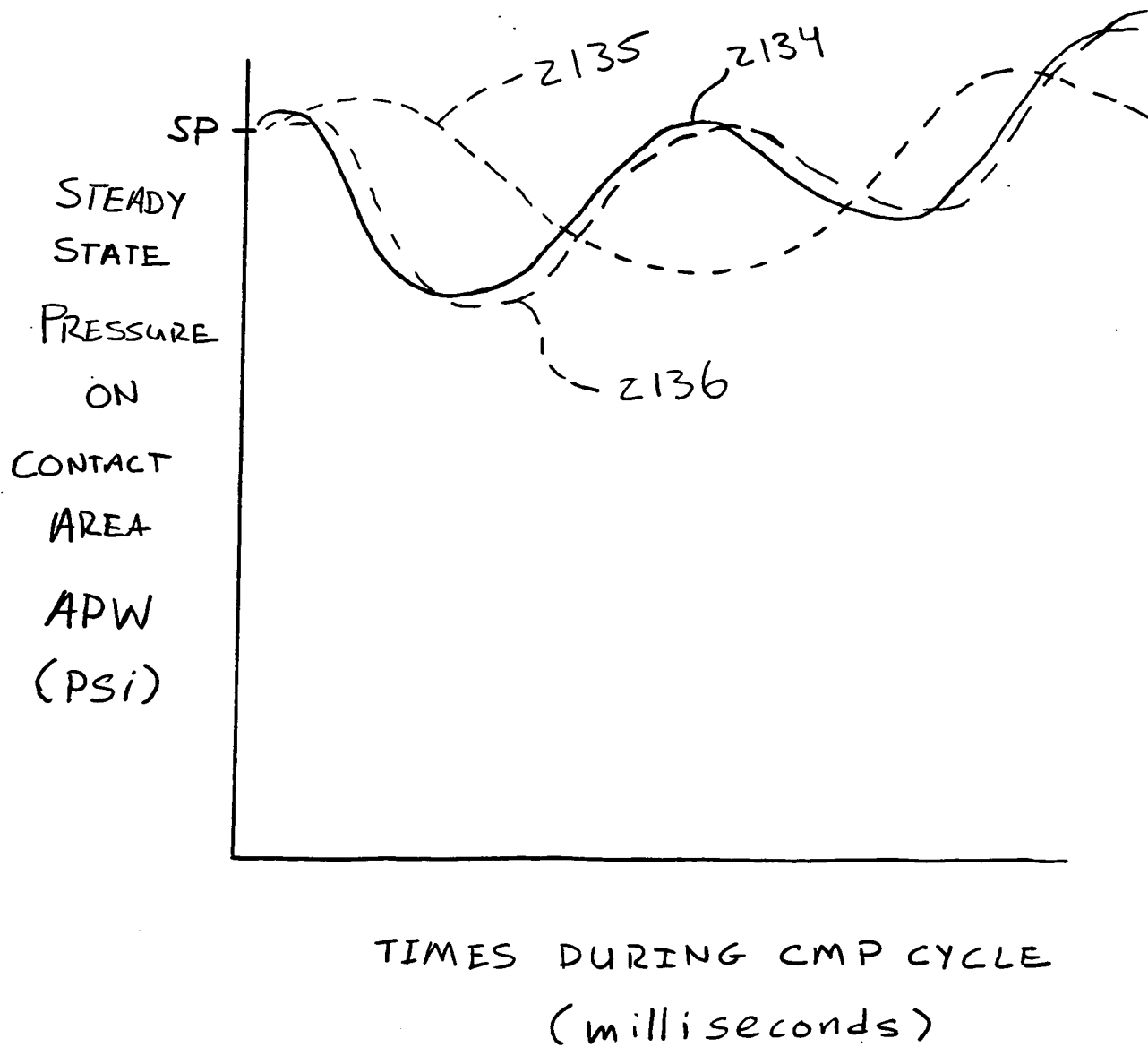


FIG. 42D

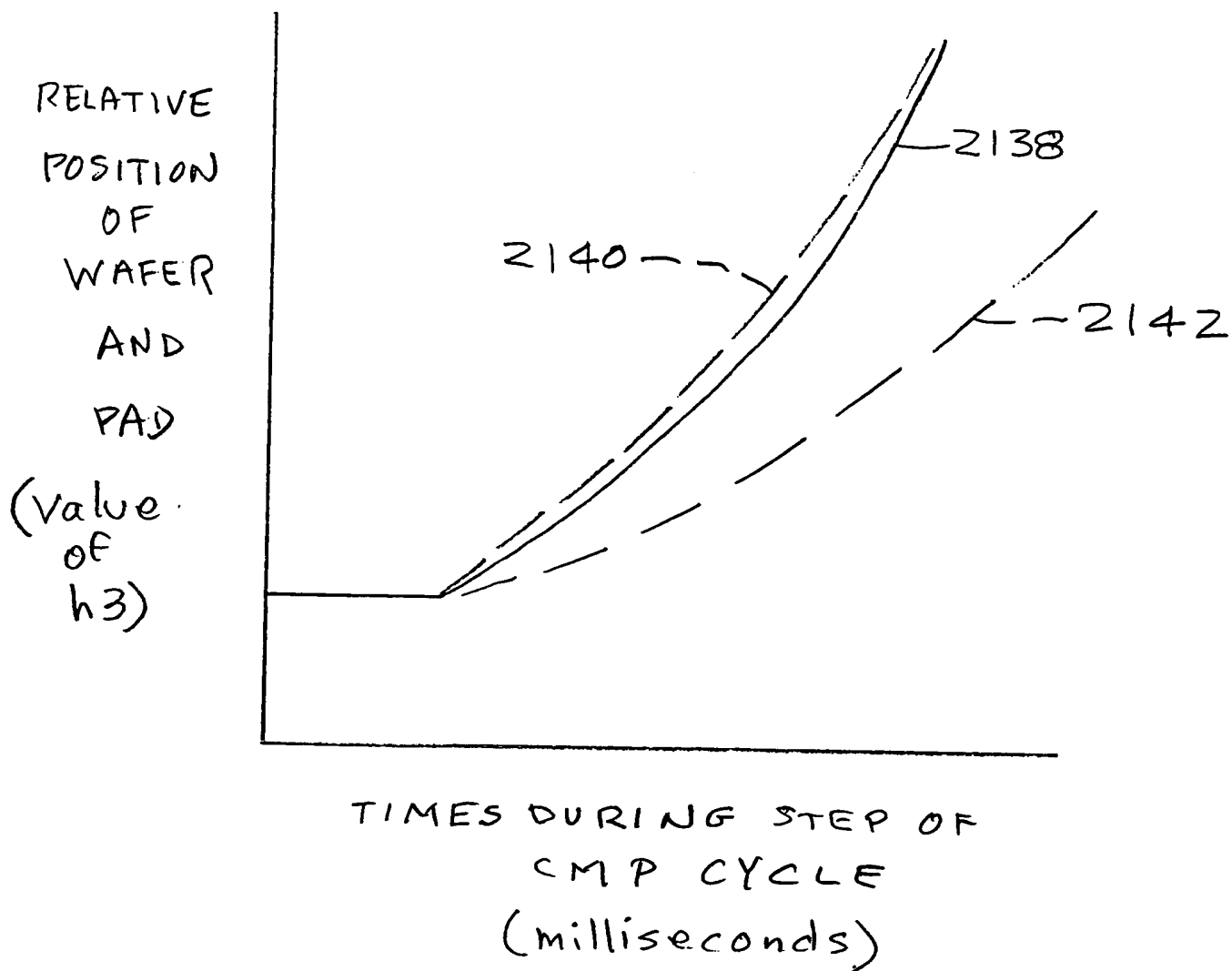


FIG. 42E

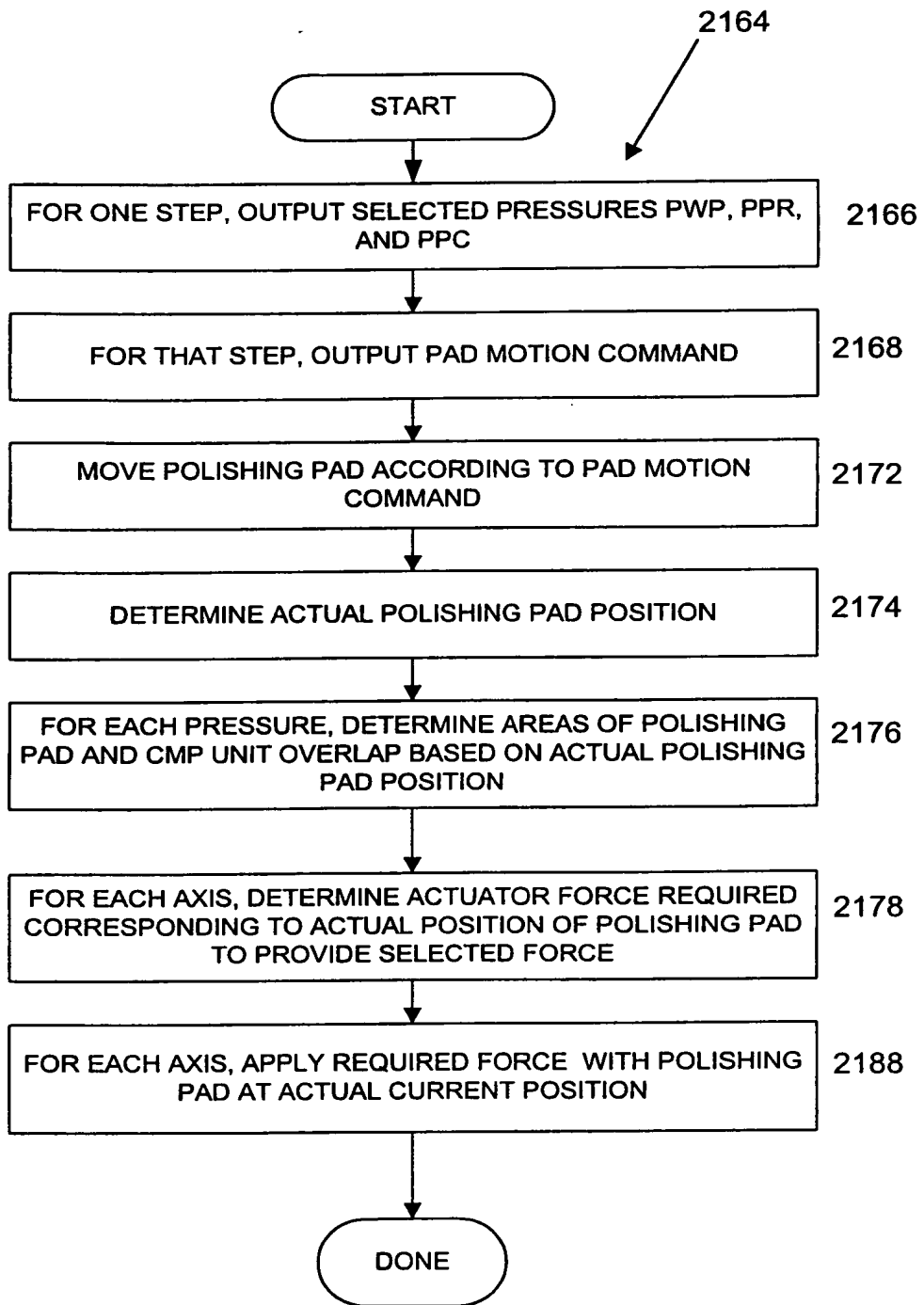


FIGURE 43

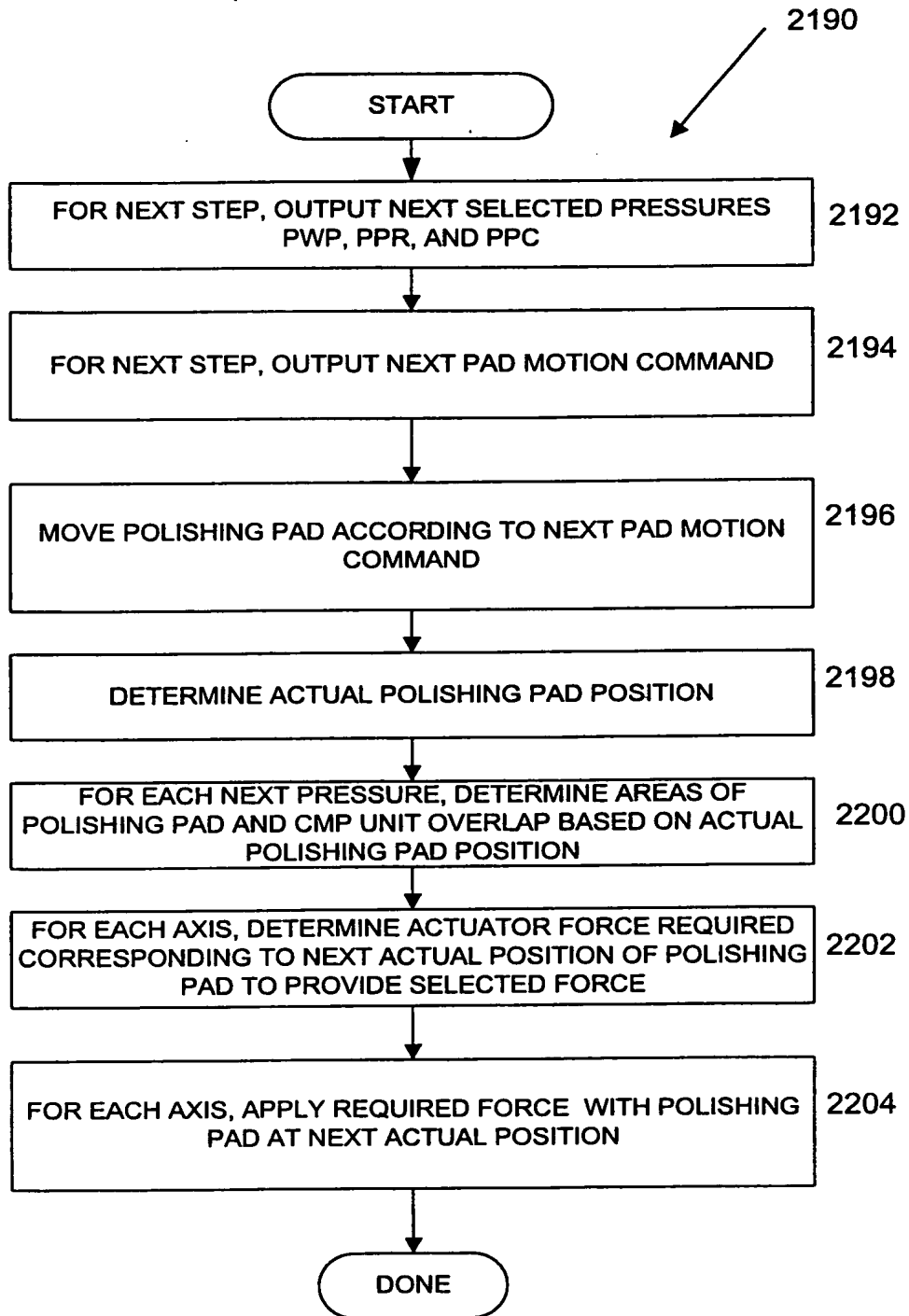


FIGURE 44

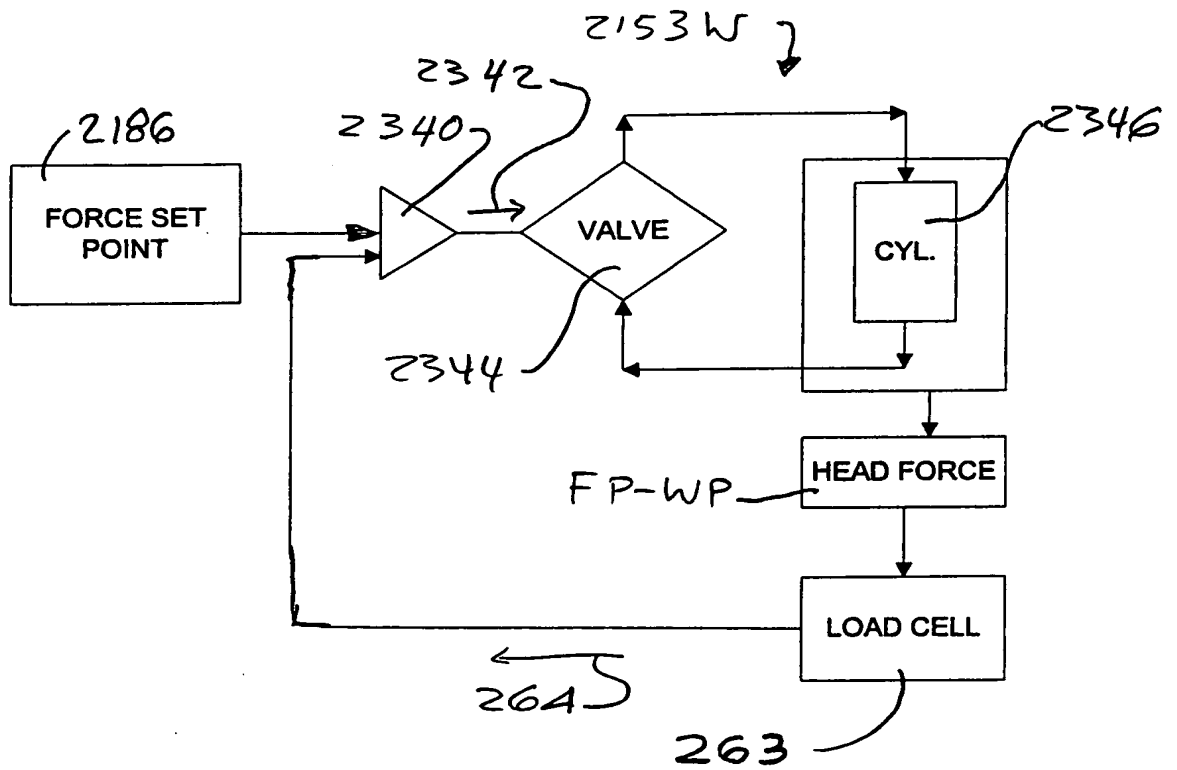


FIG. 45

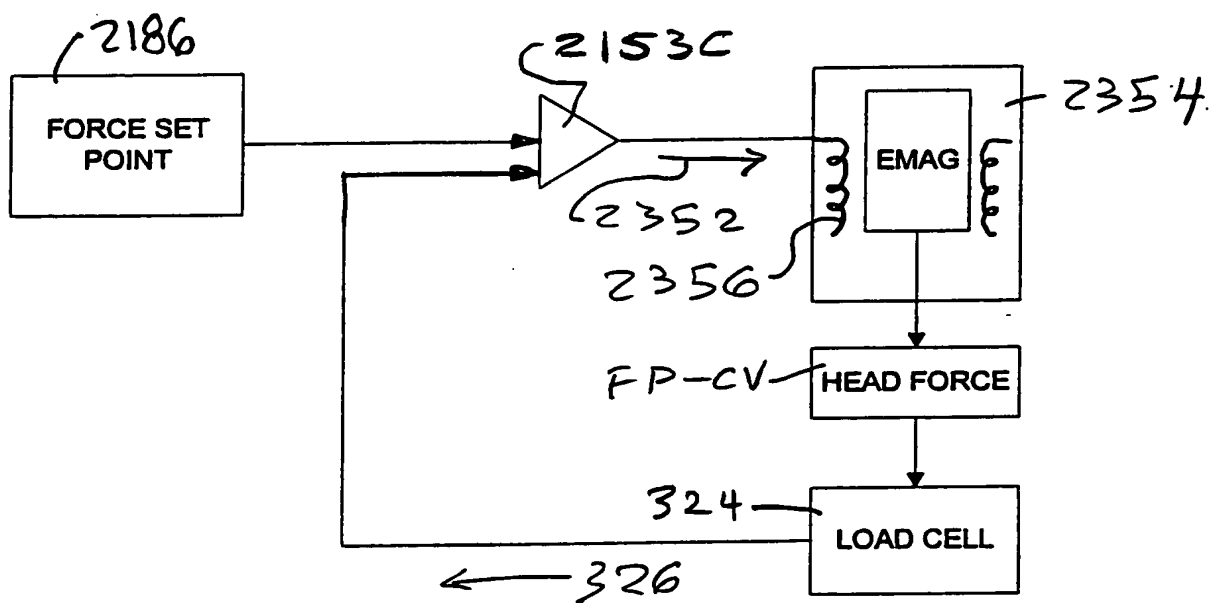


FIG. 46

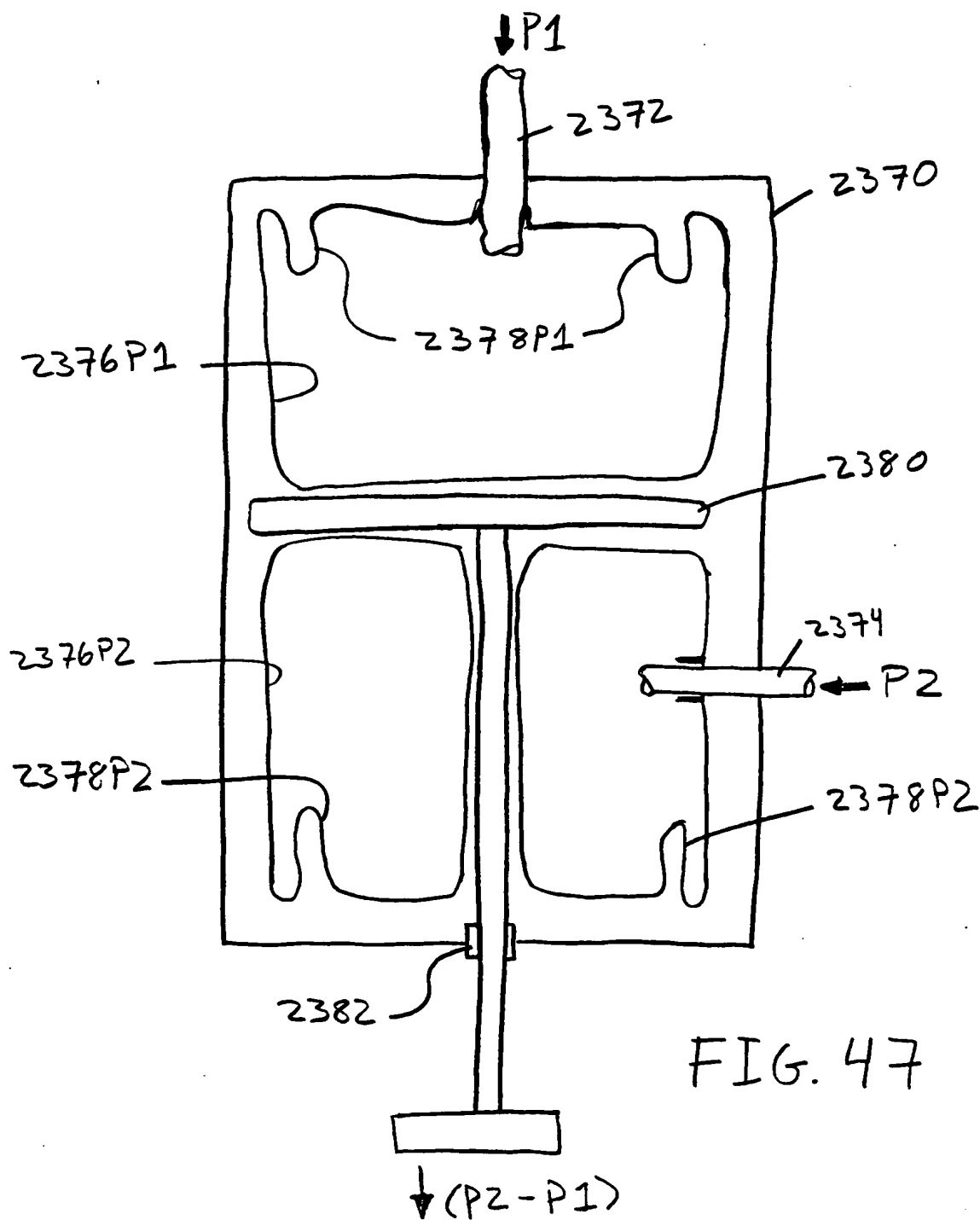


FIG. 47

FIG. 48

